```
(superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Sphingosines
     RL: BSU (Biological study, unclassified); PUR (Purification or recovery);
     THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
ΙT
     Angiogenic factors
     Apolipoproteins
     CD14 (antigen)
     CD19 (antigen)
     CD22 (antigen)
     CD36 (antigen)
     CD44 (antigen)
     CD80 (antigen)
     CD86 (antigen)
     Chemokine receptors
     Chemokines
     Chemotactic factors
     Chimeric gene
       Corticosteroid receptors
     Cytokines
     G proteins (quanine nucleotide-binding proteins)
     Gene, animal
     Gene, microbial
     Glycophorins
     Growth factor receptors
     Heavy metals
     Interleukin 1
     Interleukin 2
     Interleukin 3
     Interleukin 4
     Ligands
     Lipid A
     Lipopolysaccharides
     Lipoproteins
     Lysophosphatidylcholines
     Mannose receptors
     Metallothioneins
     Mycolic acids
     Peptidoglycans
     Promoter (genetic element)
     Scavenger receptors
     TCR (T cell receptors)
     Transcription factors
     Tumor necrosis factor receptors
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
IT
     Tumor necrosis factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
TΨ
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
```

```
(Uses)
        (superantigens; superantigen-qlycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
    Antigens
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (surface; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplastic and infectious
       diseases)
     Lipids, biological studies
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (tumor antigen; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplasm and infection)
TT
    Gene, microbial
     RL: REM (Removal or disposal); PROC (Process)
        (tumor suppressor-inactivating; superantigen-glycolipid conjugates
        loaded onto antigen presening cells for adoptive immunotherapy of
       neoplasm and infection)
IT
    Gene, animal
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (tumor suppressor; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplastic and
        infectious diseases)
TΤ
    Antigens
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (tumor-associated, lipid-based; superantigen-glycolipid conjugates loaded
        onto antigen presening cells for adoptive immunotherapy of neoplastic
       and infectious diseases)
IT
    Vaccines
        (tumor; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplastic and infectious
       diseases)
IT
     DNA
    RNA
    RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
    THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (vaccine; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplasm and infection)
ΙT
    Antitumor agents
        (vaccines; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplastic and infectious
       diseases)
    Equine encephalosis virus
ΙT
     Vaccinia virus
        (vector; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplasm and infection)
IT
    Lipoproteins
    RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (very-low-d.; superantigen-glycolipid conjugates loaded onto antigen
       presening cells for adoptive immunotherapy of neoplastic and infectious
       diseases)
IT
    Infection
```

(viral; superantigen-glycolipid conjugates loaded onto antigen

```
presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
ΙT
     Hemolysins
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (β-hemolysins; superantigen-glycolipid conjugates loaded onto
        antigen presening cells for adoptive immunotherapy of neoplastic and
        infectious diseases)
     9001-13-2P, Coagulase
IT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (Staphylococcal; superantigen-glycolipid conjugates loaded onto antigen
        presening cells for adoptive immunotherapy of neoplastic and infectious
        diseases)
     196764-84-8P, GenBank U71383 392016-27-2P, GenBank U71382
TT
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
     57-88-5DP, Cholesterol, 9-Hydroxy-10,12-octadecadienoic acid complexes
IT
                                 566-27-8P, 7β-Hydroxycholesterol
     542-78-9P, Malondialdehyde
     566-28-9P, 7-Ketocholesterol 1250-95-9P, 5\alpha, 6\alpha-
                        9002-06-6P, Thymidine kinase
                                                        9076-68-0P, Ceramide
     Epoxycholesterol
                            15514-85-9P, 9-Hydroxy-10,12-octadecadienoic acid 36871-91-7P, 7\beta-Hydroperoxycholesterol
     galactosyltransferase
     18104-45-5P, 13-HODE
     37326-33-3P, Hyaluronidase
                                   75899-68-2P, 4 Hydroxynonenal
     86090-08-6P, Angiostatin 125978-95-2P, Nitric oxide synthase
     127464-60-2P, Vascular endothelial growth factor
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
     140879-24-9, Proteasome
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (superantigen-glycolipid conjugates loaded onto antigen presening cells
        for adoptive immunotherapy of neoplastic and infectious diseases)
L46 ANSWER 25 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
     2002:888768 HCAPLUS
AN
     137:363699
DN
ED
    Entered STN: 22 Nov 2002
     Preparation of hapten-linker-large group conjugates for use in a
TΤ
     rapid kinetic-based immunoassay and specific application to steroid
     detection
     Cook, Christian John; Wu, Yinqiu; Mitchell, John Stanton
ΙN
     The Horticulture and Food Research Institute of New Zealand Limited, N. Z.
PA
     PCT Int. Appl., 76 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
     ICM C07K014-77
IC
     ICS C07J033-00; C07J043-00; G01N033-72; G01N033-53; G01N033-531
CC
     2-1 (Mammalian Hormones)
     Section cross-reference(s): 9, 32
FAN.CNT 1
```

```
KIND
                                     DATE
                                             APPLICATION NO. DATE
     PATENT NO.
      -----
                            ----
                                     -----
                                                  -----
                                               WO 2002-NZ92
     WO 2002092631
                        A1 20021121
                                                                             20020514
PΙ
          W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
               TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
               CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                     20040326
                                               NZ 2001-511705
     NZ 511705
                              Α
                                                                             20010514
                                                 EP 2002-738989
     EP 1404717
                             Α1
                                     20040407
                                                                             20020514
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2004171069
                             A1
                                     20040902
                                                 US 2004-477191
                                                                             20040114
PRAI NZ 2001-511705
                             Α
                                     20010514
     WO 2002-NZ92
                             W
                                     20020514
CLASS
                  CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                  ____
 WO 2002092631
                   ICM
                           C07K014-77
                           C07J033-00; C07J043-00; G01N033-72; G01N033-53;
                   ICS
                           G01N033-531
                           C07J033/00+IPC; C07J043/00+IPC; G01N033/543M
 US 2004171069
                 ECLA
     MARPAT 137:363699
OS
     A hapten-linker-large group conjugate for use in a rapid assay,
     wherein the assay is kinetic-based not approaching equilibrium, the
     hapten-linker-large group conjugate being of the general
     formula: X - W - Y - Z wherein: X is a hapten; W is an optional thioether
     or ether group; Y is a linker of 10 or more atoms in length; and Z is a
     large group of sufficient size to provide steric hindrance with
     respect to the binding of X to a ligand in the absence of Y. Also
     provided are processes for the production of the conjugates, assay
     methods and kits.
     steroid linker large group conjugate rapid immunoassay; hapten
ST
     linker large group conjugate rapid immunoassay
ΙT
     Immunoassay
         (SPR (Surface plasmon resonance); preparation of hapten-linker-large group
         conjugates for use in a rapid kinetic-based immunoassay and
         specific application to steroid detection)
ΙT
     Indicators
         (as conjugate large group; preparation of hapten-linker-large
         group conjugates for use in a rapid kinetic-based immunoassay
         and specific application to steroid detection)
IT
     Ovalbumin
     Proteins
     RL: ARU (Analytical role, unclassified); ANST (Analytical study)
         (as conjugate large group; preparation of hapten-linker-large
         group conjugates for use in a rapid kinetic-based immunoassay
         and specific application to steroid detection)
IT . Milk analysis
         (determination of milk progesterone; preparation of hapten-linker-large
group
         conjugates for use in a rapid kinetic-based immunoassay and
         specific application to steroid detection)
IT
     Immunoassay
```

Cordero-Garcia PCT/US03/26233 (enzyme-linked immunosorbent assay, direct or competitive ELISA; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection) Immunoassay (enzyme-linked immunosorbent assay; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection) Sterols RL: RCT (Reactant); RACT (Reactant or reagent) (esters; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection) Immunoassay (immunoadsorption chromatog.; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection) Biosensors (immunosensors; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection) Antibodies and Immunoglobulins Antibodies and Immunoglobulins Antibodies and Immunoglobulins RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (ligand in assay; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)

- IT Antibodies and Immunoglobulins
 - RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (monoclonal, ligand in assay; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- IT Peptides, analysis
 - RL: ARU (Analytical role, unclassified); ANST (Analytical study) (polypeptides as conjugate large group; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- IT Immunoassay
 - Test kits

(preparation of hapten-linker-large group **conjugates** for use in a rapid kinetic-based immunoassay and specific application to steroid detection)

IT Haptens

ΙT

ΙT

IT

IT

TΤ

- Steroids, analysis
- RL: ANT (Analyte); ANST (Analytical study)
 (preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- IT Size-exclusion chromatography (rapid immunoassay by size exclusion chromatog.; preparation of hapten-linker-large group conjugates for use in a rapid
 - kinetic-based immunoassay and specific application to steroid detection)
- IT 7440-57-5, Colloidal gold, uses
 - RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (as part of the detection system; preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and

specific application to steroid detection)

- 50-22-6, Corticosterone 50-23-7, ΙT
 - 57-83-0, Progesterone, analysis Hydrocortisone 58-22-0, Testosterone 64-85-7, 21-Hydroxyprogesterone 80-75-1, $11\alpha-Hydroxyprogesterone$ 68-96-2, 17α-Hydroxyprogesterone
 - 510-64-5 1662-06-2,
 - 17α , 20β -Dihydroxy-4-pregnen-3-one
 - RL: ANT (Analyte); ANST (Analytical study)
 - (preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- IT 40845-01-0D, conjugates with ovalbumin 475503-52-7
 - RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- 81983-26-8DP, conjugates with ovalbumin 81983-42-8DP, IT conjugates with ovalbumin 455333-64-9DP, conjugates with ovalbumin 455333-66-1DP, conjugates with ovalbumin 475503-48-1DP, conjugates with ovalbumin 475503-50-5DP, conjugates with ovalbumin 475503-51-6DP, conjugates with ovalbumin
 - RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
 - (preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- 538-75-0 4246-51-9 6066-82-6, 60-32-2, 6-Aminocaproic acid IT 40844-99-3 Hydroxysuccinimide 81983-26-8
 - RL: RCT (Reactant); RACT (Reactant or reagent)
 - (preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- IT 81983-42-8P 194920-62-2P 455333-63-8P 455333-64**-**9P 455333-65-0P 455333-66-1P 475503-47-0P 475503-48-1P 475503-49-2P 475503-50-5P 475503-51-6P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 - (preparation of hapten-linker-large group conjugates for use in a rapid kinetic-based immunoassay and specific application to steroid detection)
- THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 31 RE
- (1) American Cyanamid Company; EP 313873 A1 1989 HCAPLUS
- (2) Annunziato, M; Bioconjugate Chemistry 1993, V4(3), P212 HCAPLUS
- (3) Bieniarz, C; US 5191066 A 1993 HCAPLUS
- (4) Bieniarz, C; Bioconjugate Chemistry 1996, V7, P88 HCAPLUS
- (5) Bristol-Myers Squibb Company; EP 398305 B1 1990 HCAPLUS
- (6) Bristol-Myers Squibb Company; WO 9723243 A1 1997 HCAPLUS
- (7) Brummond, B; US 5578457 A 1996 HCAPLUS
- (8) Chiron Corporation; WO 0116306 A2 2001 HCAPLUS
- (9) Danielson, S; US 5298403 A 1994 HCAPLUS
- (10) Genentech Inc; WO 9010448 A2 1990 HCAPLUS
- (11) Gilead Sciences Inc; WO 9114696 A1 1991 HCAPLUS
- (12) Greenwald, R; US 6251382 B1 2001 HCAPLUS
- (13) Hamann, P; US 5773001 A 1998 HCAPLUS
- (14) Institut Fur Diagnostikforschunb Gmbh And der Freien Universitat Berlin; AU 9212147 A 1992 HCAPLUS
- (15) Institut Fur Diagnostikforschung Gmbh And der Freien Universitat Berlin; AU 9212148 A 1992 HCAPLUS

- (16) Institut Fur Diagnostikforschung Gmbh And der Freien Universitat Berlin; CA 2156618 A1 1994 HCAPLUS
- (17) Kesel, A; WO 9957124 A1 1999 HCAPLUS
- (18) Khanna, P; US 4351760 A 1982 HCAPLUS
- (19) Magda, D; US 6022959 A 2000 HCAPLUS
- (20) Merck & Co Inc; WO 9715316 A1 1997 HCAPLUS
- (21) Neuenhofer, S; US 5834206 A 1998 HCAPLUS
- (22) Nst Neurosurvival Technologies Ltd; WO 0132662 A2 2001 HCAPLUS
- (23) Ortho-Clinical Diagnostics Inc; EP 992512 A2 2000 HCAPLUS
- (24) Pe Corporation; WO 0132783 Al 2001 HCAPLUS
- (25) Protein Delivery Inc; WO 0009073 A2 2000 HCAPLUS
- (26) Roche Diagnostics Corporation; WO 9963346 Al 1999 HCAPLUS
- (27) Sclavo Inc; WO 8900291 A1 1989 HCAPLUS
- (28) Steffan, G; DE 19814814 A1 1999 HCAPLUS
- (29) Swain, P; US 5876727 A 1999 HCAPLUS
- (30) The Liposome Company Inc; WO 0100247 A1 2001 HCAPLUS
- (31) Ullman, E; US 4039385 1977 HCAPLUS
- IT 50-22-6, Corticosterone 50-23-7,

Hydrocortisone 80-75-1, 11α -Hydroxyprogesterone RL: ANT (Analyte); ANST (Analytical study)

(preparation of hapten-linker-large group conjugates for

use in a rapid kinetic-based immunoassay and specific application to steroid detection)

- RN 50-22-6 HCAPLUS
- Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11β)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

- RN 50-23-7 HCAPLUS
- Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β) (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

80-75-1 HCAPLUS

Pregn-4-ene-3,20-dione, 11-hydroxy-, (11 α)- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

ANSWER 26 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

AN 2002:832576 HCAPLUS

DN 137:346197

Entered STN: 01 Nov 2002 ED

Treatment of respiratory and lung diseases with antisense oligonucleotides TIand a bronchodilating agent

Nyce, Jonathan W.; Li, Yukui; Sandrasagra, Anthony; Katz, Evan; Pabalan, Jonathan; Aguilar, Douglas; Miller, Shoreh; Tang, Lei; Shahabuddin, Syed Epigenesis Pharmaceuticals, Inc., USA ΙN

PΑ

PCT Int. Appl., 764 pp. SO

CODEN: PIXXD2

DTPatent

LA English

ICICM A61K

1-9 (Pharmacology) CC

FAN.CNT 5

| rAN. | ⊃IA T | Ç | | | | | | | | | | | | | | | | |
|------|---------------|-----|-----|-----|-----|-------------|-----|------|-----|-----------------|------|----------|-----|-----|-----|------|-----|-----|
| | PATENT NO. | | | | | | D | DATE | | APPLICATION NO. | | | | | | DATE | | |
| | | | | | | | - | | | | | | | | | | | |
| PI | WO 2002085309 | | | | | A2 20021031 | | | Ī | WO 2 | 002- | 20020423 | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | | | | | | DK, | | | | | | | | | | |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | KΖ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | OM, | PH, |
| | | | PL, | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TN, | TR, | TT, | ΤZ, |
| | | | UA, | UG, | US, | UZ, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | ΚZ, | MD, | RU, |
| | | | ТJ, | TM | | | | | | | | | | | | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | MZ, | SD, | SL, | SZ, | ΤZ, | UG, | ZM, | ZW, | ΑT, | ΒE, | CH, |

```
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      US 2004049022
                                      20040311
                              A1
                                                  US 2003-627930
                                                                               20030725
PRAI US 2001-286036P
                              P
                                      20010424
      WO 2002-US13135
                              A2
                                      20020423
      WO 2002-US13143
                              A2
                                      20020423
CLASS
 PATENT NO.
                   CLASS PATENT FAMILY CLASSIFICATION CODES
 WO 2002085309 ICM
                            A61K
     MARPAT 137:346197
```

This patent relates to a composition comprising a carrier, oligonucleotides AB (oligos) that are antisense to adenosine receptors, and contain low amts. of or no adenosine (A), plus bronchodilating agents. All antisense oligonucleotides designed in accordance with the invention were highly effective at countering or reducing effects mediated by the receptors to which they are targeted. Two antisense phosphorothioated oligos targeting human adenosine A1 receptor mRNA, one targeting adenosine A2b receptor, and two targeting an A3 receptor are capable of countering the effect of exogenously administered adenosine which is mediated by the specific receptor they are targeted to. The activity of the antisense oligos are specific to the target and substitutively fail to inhibit another target. An oligonucleotide wherein the phosphodiester bonds are substituted with phosphorothicate bonds evidenced an unexpected superiority over the phosphodiester antisense oligo. In addition, they result in extremely low or non-existent deleterious side effects or toxicity. This represents 100% success in providing agents that are highly effective and specific in the treatment of bronchoconstriction and/or inflammation. These agents and the composition and formulations provided are suitable for the treatment of respiratory tract, pulmonary and malignant diseases associated with bronchoconstriction, respiratory tract inflammation and allergies, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject, such as allergies, asthma, impeded respiration, allergic rhinitis, pain, cystic fibrosis, pulmonary fibrosis, RDA, COPD, and cancers, among others. The present agents and composition may be administered preventatively, prophylactically or therapeutically in conjunction with other therapies, or may be utilized as a substitute for therapies that have significant, neg. side effects. The method of the present invention is also practiced with antisense oligonucleotides targeted to many genes, mRNAs and their corresponding proteins in essential the same manner.

ST respiratory disease treatment antisense oligonucleotide bronchodilator; lung disease treatment antisense oligonucleotide bronchodilator; bronchoconstriction treatment antisense oligonucleotide bronchodilator; adenosine receptor antisense oligonucleotide respiratory disease

IT Syntaxins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (11, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (11-17 lysine-rich leukemia gene, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Keratins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (18, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense

```
oligonucleotides and a bronchodilating agent)
    Laminins
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (5, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
     Transcription factors
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (AP-1 (activator protein 1), antisense oligo designed for specificity
        to mRNA encoding; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
IT
    ADP ribosylation factor
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (ARF-7, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
    Adenosine receptors
TΤ
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (A1, reducing levels of; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
ΙT
    Adenosine receptors
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (A2B, reducing levels of; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
ΙT
    Adenosine receptors
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (A3, reducing levels of; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
TΤ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (B, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
    Bradykinin receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (B1, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Bradykinin receptors
     Bradykinin receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (B2, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (C-terminal-binding, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (C/EBP-\beta) (CCAAT box/enhancer element-binding protein \beta),
        antisense oligo designed for specificity to mRNA encoding; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
```

specificity to mRNA encoding; treatment of respiratory and lung

(CAP (adenylate cyclase-associated protein), antisense oligo designed for

```
diseases with antisense oligonucleotides and a bronchodilating agent)
     Chemokine receptors
TΤ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (CCR1, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Chemokine receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (CCR2, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Chemokine receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (CCR3, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Chemokine receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (CCR4, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Chemokine receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (CCR5, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
     Diglycerides
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CDP derivs., surfactant formulation containing; treatment of respiratory
        and lung diseases with antisense oligonucleotides and a bronchodilating
        agent)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (CGI-142, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Intestine, disease
        (Crohn's, cotreatment with agents for; treatment of respiratory and
        lung diseases with antisense oligonucleotides and a bronchodilating
        agent)
ΙT
     Molecular chaperones
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (DnaJ, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Selectins
     Selectins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (E-, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (ERj3, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (FK5-binding, antisense oligo designed for specificity to mRNA
```

- encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Transcription factors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (GATA-3, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Histones
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (H2A, family member N, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT High-mobility group proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (HMG-I(Y), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT High-mobility group proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (HMG1, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT High-mobility group proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (HMG17, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Heat-shock proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (HSP 40, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Animal cell line
 - (HTB-54, treatment of human lung adenocarcioma; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Cell adhesion molecules
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ICAM-1 (intercellular adhesion mol. 1), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Cell adhesion molecules
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ICAM-2 (intercellular adhesion mol. 2), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Cell adhesion molecules
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ICAM-3 (intercellular adhesion mol. 3), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Transcription factors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (IE175 (immediate-early, 175 kDa), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Transcription factors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ISGF, antisense oligo designed for specificity to mRNA encoding;

treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Immunoglobulin receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (IgE, high affinity, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Selectins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (L-, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Lipoprotein receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (LDL, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Cell adhesion molecules

RL: BSU (Biological study, unclassified); BIOL (Biological study) (MAdCAM-1 (mucosal addressin cell adhesion mol.-1), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Cytokines

RL: BSU (Biological study, unclassified); BIOL (Biological study) (MBP (major basic protein), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Transcription factors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (NF- κ B (nuclear factor of κ light chain gene enhancer in B-cells), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Transcription factors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (NFAT1 (nuclear factor of activated T-cell, 1), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (Nef-associated factor 1, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Selectins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (P-, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Cell adhesion molecules

RL: BSU (Biological study, unclassified); BIOL (Biological study) (PECAM-1, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Protein motifs

(PH (pleckstrin homol.) domain, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

```
ΙT
     Glycoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (PSGL-1 (P-selectin glycoprotein ligand-1), antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Chemokine receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (RANTES, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Enzymes, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (RNA helicase, protein related to, antisense oligo designed for
        specificity to mRNA encoding; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Ribozymes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (RNA-inactivating agent; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Calcium-binding proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (S-100, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
     Surfactant proteins (pulmonary)
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SP-A, surfactant formulation containing; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
IT
     Surfactant proteins (pulmonary)
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SP-B, surfactant formulation containing; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
IT
     Surfactant proteins (pulmonary)
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SP-C, surfactant formulation containing; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Surfactant proteins (pulmonary)
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SP-D, surfactant formulation containing; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
IT
     Surfactant proteins (pulmonary)
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (SP-E, surfactant formulation containing; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Transcription factors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (STAT4 (signal transducer and activator of transcription 4), antisense
        oligo designed for specificity to mRNA encoding; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
TΤ
     Transcription factors.
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (STAT6 (signal transducer and activator of transcription 6), antisense
        oligo designed for specificity to mRNA encoding; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
IT
     Receptors
```

(Tryptase, antisense oligo designed for specificity to mRNA encoding;

RL: BSU (Biological study, unclassified); BIOL (Biological study)

```
treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
     Cell adhesion molecules
TΤ
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (VCAM-1, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
TΤ
    Myosins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (X, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (actin-binding, 278, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (adducin, 1, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Drug delivery systems
        (aerosols; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Nose, disease
        (allergic rhinitis, treatment of; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
IT
     Respiratory tract, disease
        (allergy, treatment of; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΙT
     Integrins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antigens Mac-1 (macrophage 1), antisense oligo designed for
        specificity to mRNA encoding; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
    Antibodies and Immunoglobulins
ΤТ
    CD34 (antigen)
     CD44 (antigen)
     Chemokines
     Cyclophilins
     Cytokines
    Enzymes, biological studies
    Eotaxin
     Fibronectins
    Histamine receptors
     Interleukin 1
     Interleukin 1 receptors
     Interleukin 11
     Interleukin 1\beta
     Interleukin 1B
     Interleukin 3
     Interleukin 3 receptors
     Interleukin 4 receptors
     Interleukin 5 receptors
     Interleukin 8 receptors
     Interleukin 9
     Interleukin 9
     LFA-1 (antigen)
```

```
Macrophage inflammatory protein 1\beta
     Macrophage inflammatory protein 2
     Monocyte chemoattractant protein-1
     Muscarinic receptors
     Osteonectin
     Prostanoid receptors
     Receptors
     Tachykinin receptors
     Tubulins
     Tumor necrosis factors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antisense oligo designed for specificity to mRNA encoding; treatment
        of respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
IT
     Phosphorothioate oligodeoxyribonucleotides
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antisense; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
TI
     Heterocyclic compounds
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (aromatic, oligonucleotides containing universal bases with thymidine
binding
        activity; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Heart, disease
        (arrhythmia, cotreatment with agents for; treatment of respiratory and
        lung diseases with antisense oligonucleotides and a bronchodilating
        agent)
IT
    Mental disorder
        (bipolar disorder, cotreatment with agents for; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
ΙT
    Bronchi, disease
        (bronchitis, treatment of; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
ΙT
    Bronchi
        (bronchoconstriction, treatment of; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (calumenin, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
TΤ
    Bronchi, disease
        (chronic bronchitis, cotreatment with agents for; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
ΙT
    Lung, disease
        (chronic obstructive, cotreatment with agents for; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
ΙT
    Aging, animal
    Anxiety
    Burn
     Ischemia
    Lupus erythematosus
    Menopause
```

```
Schizophrenia
        (cotreatment with agents for; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Imaging agents
        (cotreatment with radioactive or fluorescent; treatment of respiratory
        and lung diseases with antisense oligonucleotides and a bronchodilating
ΙT
     Analgesics
     Angiogenesis inhibitors
     Antacids
    Anti-inflammatory agents
    Antiarthritics
    Antibacterial agents
    Antidepressants
    Antidiarrheals
    Antihistamines
    Antihypertensives
    Antihypotensives
    Antitumor agents
    Antiviral agents
    Appetite depressants
     Cholinergic antagonists
     Contraceptives
     Laxatives
    Muscle relaxants
     Purinoceptor antagonists
     Skin preparations (pharmaceutical)
     Sunscreens
     Tranquilizers
     Wound healing promoters
        (cotreatment with; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΙT
    Alkaloids, biological studies
    Bile acids
    Glucocorticoids
    Growth factors, animal
    Hormones, animal, biological studies
    Steroids, biological studies
    Vitamins
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (cotreatment with; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΤТ
    Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (cyclosporin A-binding, antisense oligo designed for specificity to
       mRNA encoding; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΤТ
    Leukotriene receptors
    RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (cysteine-containing, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΤТ
    Receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (diphtheria toxin, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
```

ΙT

Immunity

Sleep

(disorder, cotreatment with agents for; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Cosmetics

Drug delivery systems

(emollients, cotreatment with; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Lymphokine receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (eotaxin, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Skin, disease

(epidermolysis bullosa, junctional, Herlitz's type, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (epilegrin, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (gene c-mas, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (gene fork head, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Hair preparations

(growth stimulants, cotreatment with; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (hDj9, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Aromatic compounds

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (heterocyclic, oligonucleotides containing universal bases with thymidine binding activity; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Lung, disease

(infection, treatment of; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Lung, disease

Respiratory tract, disease

(inflammation, treatment of; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Intestine, disease

(inflammatory, cotreatment with agents for; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)

IT Interleukin receptors

- RL: BSU (Biological study, unclassified); BIOL (Biological study) (interleukin 11, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Interleukin 1 receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (interleukin 1β , antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Interleukin receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (interleukin 9, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (intermediate filament-associated, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Chloride channel
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (intracellular 1, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (karyopherin α , α 1 and α 2, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Proteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (ligand-binding, antisense oligo designed for specificity to mRNA
 encoding; treatment of respiratory and lung diseases with antisense
 oligonucleotides and a bronchodilating agent)
- IT Drug delivery systems
 - (liposomes; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Chemokines
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (macrophage inflammatory protein 3, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Chemokines
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (macrophage inflammatory protein 4, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Cell adhesion molecules
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (melanoma, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Mental disorder
 - (mood-affecting, cotreatment with agents for; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (neutrophil adherence, antisense oligo designed for specificity to mRNA

encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ΙT Cytokines RL: BSU (Biological study, unclassified); BIOL (Biological study) (neutrophil chemotactic factor, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) TΨ Mammalia (non-human; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ITDNA sequences (of antisense oligonucleotides and their targets; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ΙT Integrins RL: BSU (Biological study, unclassified); BIOL (Biological study) (p150,95 antigen, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ΙT Neurotransmitters RL: BSU (Biological study, unclassified); BIOL (Biological study) (peptide, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ΙT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (plectins, 1, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) Fatty acids, biological studies TΤ RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polyunsatd., n-3, surfactant formulation containing; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ΙT Proteins RL: BSU (Biological study, unclassified); BIOL (Biological study) (programmed cell death 5, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ITHypertension (pulmonary, treatment of; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ITAdenosine receptors RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (reducing levels of; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent) ΙT Lecithins Lysophosphatidylcholines Lysophosphatidylethanolamines

Lecithins
Lysophosphatidylcholines
Lysophosphatidylethanolamines
Phosphatidic acids
Phosphatidylcholines, biological studies
Phosphatidylethanolamines, biological studies
Phosphatidylglycerols
Phosphatidylglycerols
Phosphatidylinositols
Phosphatidylserines
Polyoxyalkylenes, biological studies
Ubiquinones
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(surfactant formulation containing; treatment of respiratory and lung

```
diseases with antisense oligonucleotides and a bronchodilating agent)
IT
     Proteoglycans, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (testican, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (transmembrane, Fn14, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     Pulmonary surfactant
        (treating depletion or hyposecretion of; treatment of respiratory and
        lung diseases with antisense oligonucleotides and a bronchodilating
        agent)
ΤТ
     Human
        (treatment of lung adenocarcioma HTB-54 cells of; treatment of
        respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
IT
     Transplant rejection
        (treatment of pulmonary; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
ΙT
     Allergy inhibitors
     Anti-inflammatory agents
     Antitumor agents
     Bronchodilators
     Drug delivery systems
     Gene therapy
     Human
        (treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Antisense oligonucleotides
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
    Asthma
ΤT
     Cystic fibrosis
     Emphysema
     Neoplasm
     Pain
     Respiratory distress syndrome
     Vasoconstriction
        (treatment of; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (tumor-associated, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     Endothelin receptors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (type ETA, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
     Endothelin receptors
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (type ETB, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
```

- oligonucleotides and a bronchodilating agent)
- IT Tachykinin receptors
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (type NK1, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Collagens, biological studies
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (type XVII, $\alpha 1$ -subunit, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Enzymes, biological studies
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (ubiquitin-conjugating, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Intestine, disease
 (ulcerative colitis, cotreatment with agents for; treatment of
 respiratory and lung diseases with antisense oligonucleotides and a
 bronchodilating agent)
- IT Potassium channel
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (voltage-gated, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Selectins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha 4\beta 1$ and $\alpha 4\beta 7$, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Tubulins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (αl -, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Integrins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha 2$, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Tubulins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha 2$ -, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Integrins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) ($\alpha 4\beta 1$, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Tubulins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (β -, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense oligonucleotides and a bronchodilating agent)
- IT Proteins
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (β -polypeptide, antisense oligo designed for specificity to mRNA encoding; treatment of respiratory and lung diseases with antisense

```
oligonucleotides and a bronchodilating agent)
ΙT
     Adrenoceptor agonists
        (\beta^2-, cotreatment with; treatment of respiratory and lung diseases
        with antisense oligonucleotides and a bronchodilating agent)
ΙT
     159606-08-3, IkB Kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (1 and 2, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     9001-51-8, Hexokinase
                              9014-08-8, Enolase
                                                    183257-54-7, Heparan sulfate
     3-0-sulfotransferase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (1, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     9001-60-9, Lactate dehydrogenase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (A, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     9040-57-7, Ribonucleotide reductase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (M2 polypeptide, antisense oligo designed for specificity to mRNA
        encoding; treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     120-73-0D, 1H-Purine, derivs., oligonucleotides containing
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (Purines, purine universal bases with thymidine binding activity;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     9001-84-7, Phospholipase A2
                                     9012-25-3, Catechol methyltransferase
     9027-73-0, 5'-Nucleotidase
                                    9032-68-2, Cathepsin C
                                                              9035-58-9, Blood
     coagulation factor III
                               9036-21-9, Phosphodiesterase IV
                                                                    9046-27-9,
     γ-Glutamyltransferase
                              9077-14-9, Farnesyl diphosphate
     farnesyltransferase 9080-21-1, 7-Dehydrocholesterol reductase
     33507-63-0, Substance P 51434-21-0, Stanniocalcin
                                                              51982-36-6,
                         56626-18-7, Fucosyltransferase 65154-06-5, Platelet 71160-24-2, LTB4 78990-62-2, Calpain 80295-54-1,
     Prostaglandin G2
     activating factor
                          71160-24-2, LTB4
                       80619-02-9, 5-Lipoxygenase
     Complement C5a
                                                      80804-53-1, Complement C3bi
     81669-70-7, Metalloproteinase
                                       97501-92-3, Chymase
                                                              97501-93-4, Tryptase
     106096-93-9, Basic fibroblast growth factor
                                                      114540-95-3,
     Preproendothelin
                         122653-71-8, β2-Adrenergic receptor kinase
     127464-60-2, Vascular endothelial growth factor 140879
141436-78-4, Protein kinase C 142243-02-5, MAP kinase
192140-82-2, Squamous cell carcinoma antigen 1 329900-
                                                          140879-24-9, Proteasome
                                                         329900-75-6,
     Prostaglandin endoperoxide synthase 2 329967-85-3, Cyclooxygenase 1
                                   424830-41-1, \beta-Defensin 3
     376596-92-8, \beta-Defensin 1
     426206-97-5, \beta-Defensin 2
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (antisense oligo designed for specificity to mRNA encoding; treatment
        of respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
                    474039-55-9
ΙT
     473869-78-2
                                   474039-56-0
                                                 474039-60-6
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antisense oligo targeted to human adenosine Al receptor mRNA;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
```

```
IT
     474039-59-3
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
         (antisense oligo targeted to human adenosine A2b receptor mRNA;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     474039-57-1
                     474039-58-2
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
         (antisense oligo targeted to human adenosine A3 receptor mRNA;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
IT
     58-55-9, Theophylline, biological studies
                                                     299-42-3, Ephedrine
     530-08-5, Isoetharine
                               586-06-1, Metaproterenol
                                                             7683-59-2.
                                                 18559-94-9, Albuterol
     Isoproterenol
                       13392-18-2, Fenoterol
     23031-25-6, Terbutaline 72332-33-3, Procaterol
                                 30392-40-6, Bitolterol
                                                             38677-81-5, Pirbuterol
                                 73573-87-2, Formoterol
                                                            81732-65-2, Bambuterol
     89365-50-4, Salmeterol 136112-01-1, Seretide
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (cotreatment with; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΙT
     125978-95-2, Nitric oxide synthase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inducible, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
ΙT
     9004-06-2, Elastase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (neutrophil, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
                                                       188165-32-4, GenBank
ΙT
     165640-48-2
                    188162-46-1, GenBank AA278764
     AA278764
                 206619-35-4, GenBank AA906703 206701-63-5, GenBank AA909635
     209715-34-4, GenBank AI024215
210257-22-0, GenBank AI038433
210314-45-7, GenBank AI041482
212917-21-0, GenBank AI092623
213174-26-6, GenBank AI096522
214722-34-6, GenBank AI122807
215834-71-2 GenBank AI125651
                                        209949-42-8, GenBank AI034360
                                        210312-00-8, GenBank AI041212
                                        210675-81-3, GenBank AI051839
                                        212946-30-0, GenBank AI095492
                                        214720-89-5, GenBank AI122689
                                        215829-94-0, GenBank AI125228
                                        215888-95-2, GenBank AI128305
     215834-71-2, GenBank AI125651
     216915-25-2, GenBank AI138216
389454-10-8, GenBank AA284245
                                        225747-61-5, GenBank AF151802
391563-92-1, GenBank T74688
                                                                         391780-67-9,
                                                           391849-65-3, GenBank
                        391840-11-2, GenBank AA293300
     GenBank N58473
                 391990-11-7, GenBank AA459692
                                                    391992-05-5, GenBank AA463249
     392029-03-7, GenBank AA678160
     RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
     (Biological study)
         (nucleotide sequence; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
ΙT
     289-95-2D, Pyrimidine, derivs., oligonucleotides containing
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
         (pyrimidine universal bases with thymidine binding activity; treatment
        of respiratory and lung diseases with antisense oligonucleotides and a
        bronchodilating agent)
     58-61-7, Adenosine, biological studies
ΙT
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
```

(reducing sensitivity to or levels of; treatment of respiratory and

```
lung diseases with antisense oligonucleotides and a bronchodilating
        agent)
     53-43-0, Dehydroepiandrosterone
IT
                                      56-81-5, Glycerol, biological studies
     57-03-4
               57-04-5, Dihydroxyacetone phosphate 57-10-3, Palmitic acid,
     biological studies
                          62-49-7, Choline 96-26-4, Dihydroxyacetone
                                 987-78-0, CDP-Choline
     107-73-3, Choline phosphate
                                                            2644-64-6,
                                      9002-92-0, Brij 35
     Dipalmitoylphosphatidylcholine
                                                            9002-93-1, Triton
             9004-54-0, Dextran, biological studies
     X-100
                                                     11029-02-0D, Dolichol,
               17364-18-0, Palmitoyllysophosphatidylcholine
     compds.
                                                               25322-69-4
     26336-38-9, Poly(vinyl amine)
                                     37291-72-8, Polyenoic acid 85682-59-3,
              95233-18-4, Atovaquone 99732-49-7, Exosurf
                                                              106565-43-9,
     Ethylene-propylene block copolymer
                                          258856-56-3, ALEC
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (surfactant formulation containing; treatment of respiratory and lung
        diseases with antisense oligonucleotides and a bronchodilating agent)
ΙT
     2382-65-2D, methylated, oligonucleotides containing
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
TT
     890-38-0D, 2'-Deoxyinosine, oligonucleotides containing
     2'-Deoxynebularine, oligonucleotides containing 6146-52-7D, 5-Nitroindole,
     oligonucleotides containing 126128-35-6D, oligonucleotides containing
     157066-48-3D, oligonucleotides containing
                                                 191421-10-0D, oligonucleotides
     containing
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (universal base; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
     9001-88-1, Phosphorylase kinase
TT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (δ, antisense oligo designed for specificity to mRNA encoding;
        treatment of respiratory and lung diseases with antisense
        oligonucleotides and a bronchodilating agent)
     136112-01-1, Seretide
TΤ
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (cotreatment with; treatment of respiratory and lung diseases with
        antisense oligonucleotides and a bronchodilating agent)
     136112-01-1 HCAPLUS
RN
     Androsta-1,4-diene-17-carbothioic acid, 6,9-difluoro-11-hydroxy-16-methyl-
CN
     3-oxo-17-(1-oxopropoxy)-, S-(fluoromethyl) ester,
     (6\alpha, 11\beta, 16\alpha, 17\alpha) -, mixt. with 4-hydroxy-\alpha1-
     [[[6-(4-phenylbutoxy)hexyl]amino]methyl]-1,3-benzenedimethanol (9CI) (CA
     INDEX NAME)
     CM
          1
     CRN 89365-50-4
     CMF C25 H37 N O4
```

HO

HO

$$(CH_2)$$
 6
 (CH_2)
 4

Ph

CM 2

CRN 80474-14-2

CMF C25 H31 F3 O5 S

Absolute stereochemistry.

L46 ANSWER 27 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:521933 HCAPLUS

DN 137:108286

ED Entered STN: 12 Jul 2002

Antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation

metastasis, leukemia, autoimmune disease, and inflammation

IN Lazarovits, Janette; Hagai, Yocheved; Plaksin, Daniel; Vogel, Tikva;

Nimrod, Abraham; Mar-Haim, Hagit; Szanthon, Ester; Richter, Tamar; Amit,

Boaz; Kooperman, Lena; Peretz, Tuvia; Levanon, Avigdor

PA Bio-Technology General Corp., USA

SO PCT Int. Appl., 310 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C12N

CC 15-2 (Immunochemistry)

Section cross-reference(s): 1, 3, 8, 9, 63

FAN.CNT 5

| PATENT NO. | | | | | | KIN | D | DATE 20020711 | | | APPLICATION NO. WO 2001-US49442 | | | | | | DATE 20011231 | | |
|------------|---------------|------|-----|-----|------|-----|----------------------|----------------------|-----|-----|---------------------------------|------|------|------|------|------------|----------------------|-------|--|
| PI | WO 2002053700 | | | | | A2 | | | | | | | | | | | | | |
| | WO | 2002 | | | 7\ T | A3 | | 2004 | AZ, | DΛ | ממ | P.C | סס | DV | ם ק | $C\Lambda$ | СП | CN | |
| | | VV . | MC. | MU: | AL. | mu, | \mathbf{n}_{\perp} | AU, | AU, | DA. | י עע | י טע | עונע | ע גע | 100, | UM, | | CIA . | |

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
              PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
              UA, UG, UZ, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
              KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
             GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA 2433225
                                  20020711
                                              CA 2001-2433225
                           AA
                                                                      20011231
     EP 1406930
                                              EP 2001-994330
                           Α2
                                  20040414
                                                                      20011231
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI US 2000-258948P P
                                  20001229
     US 2000-751181
                           Α
                                  20001229
     WO 2001-US49442
                          W
                                  20011231
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 WO 2002053700 ICM C12N
     The present invention provides epitopes present on cancer cells and
     important in physiol. phenomena such as cell rolling, metastasis, and
     inflammation. Therapeutic and diagnostic methods and compns. using
     antibodies capable of binding to the epitopes are provided. The
     antibodies or fragments are capable of binding to, e.g. PSGL-1, fibrinogen
     \gamma prime, GP1b\alpha, heparin, lumican, complement compound 4 (CC4),
     interalpha inhibitor and prothrombin. Methods and compns. according to
     the present invention can be used in diagnosis of and therapy for such
     diseases as cancer, including tumor growth and metastasis, leukemia,
     auto-immune disease, and inflammatory disease.
     antibody fragment epitope cancer metastasis platelet autoimmune disease
ST
     inflammation
ΤТ
     Leukemia
        (B-cell, acute; antibodies and fragments against epitopes present on
        cancer, metastatic or leukemia cells and platelets for diagnosis and
        therapy of tumor, metastasis, leukemia, autoimmune disease, and
        inflammation)
ΙT
     Complement
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CC4; antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
TΤ
     Antigens
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CD162; antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
IT
     Antiqens
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (CD42; antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
     Glycolipoproteins
ΙT
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
         (GPIba; antibodies and fragments against epitopes present on
```

cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgG; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Antibodies and Immunoglobulins

RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(IgG; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Glycoproteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (PSGL-1 (P-selectin glycoprotein ligand-1); antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Leukemia

(acute lymphocytic; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Leukemia

(acute myelogenous; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Platelet (blood)

(aggregation; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

Anti-infective agents ΙT Antibacterial agents Antitumor agents Antiviral agents Autoimmune disease Cardiovascular system, disease Cell aggregation DNA sequences Disulfide group Drugs Epitopes Human Imaging agents Immunotherapy Inflammation Leukemia Molecular cloning Multiple myeloma Peptidomimetics

Phage display library

```
Platelet (blood)
     Protein sequences
     Sulfation
     Thrombolytics
     Thrombosis
        (antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
ΙT
     Antibodies and Immunoglobulins
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
ΙT
     Carbohydrates, biological studies
     Fibrinogens
     Glycolipids
     Glycoproteins
     Lipids, biological studies
     Lipopolysaccharides
     Lipoproteins
     Peptides, biological studies
     Radionuclides, biological studies
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
ΙT
     Drug delivery systems
        (carriers; antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
ΙT
    Neoplasm
        (cell; antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
IT
    Artery, disease
        (coronary, restenosis; antibodies and fragments against epitopes
        present on cancer, metastatic or leukemia cells and platelets for
        diagnosis and therapy of tumor, metastasis, leukemia, autoimmune
        disease, and inflammation)
    Test kits
ΙT
        (diagnostic; antibodies and fragments against epitopes present on
        cancer, metastatic or leukemia cells and platelets for diagnosis and
        therapy of tumor, metastasis, leukemia, autoimmune disease, and
        inflammation)
IT
    Adhesion, biological
        (disease associated with; antibodies and fragments against epitopes
        present on cancer, metastatic or leukemia cells and platelets for
        diagnosis and therapy of tumor, metastasis, leukemia, autoimmune
        disease, and inflammation)
IT
     Immunity
        (disorder; antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
```

(emitter; antibodies and fragments against epitopes present on cancer,

ΙT

X-ray

metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
Pseudomonas
(exotoxin; antibodies and fragments against epitopes present on cancer,

(exotoxin; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Toxins

ΙT

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (exotoxins, Pseudomonas; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(fragments; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Glycoproteins

RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (glycocalicins; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(heavy chain; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and

inflammation)
IT Purpura (disease)

(idiopathic thrombocytopenic; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Drug delivery systems

(immunoconjugates; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Diagnosis

(immunodiagnosis; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT Heart, disease

(infarction; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

Antibodies and Immunoglobulins
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL

- (Biological study); PREP (Preparation); USES (Uses)
 (light chain; antibodies and fragments against epitopes present on
 cancer, metastatic or leukemia cells and platelets for diagnosis and
 therapy of tumor, metastasis, leukemia, autoimmune disease, and
 inflammation)
- Polymers, biological studies
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lipophilic; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Drug delivery systems (liposomes; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Proteoglycans, biological studies
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lumicans; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- Neoplasm
 (metastasis, cell; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Gene
 RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
 DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
 (Biological study); PREP (Preparation); USES (Uses)
 (open reading frame; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Linking agents
 (peptide; antibodies and fragments against epitopes present on cancer,
 metastatic or leukemia cells and platelets for diagnosis and therapy of
 tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Artery, disease (restenosis; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Eye, disease (retinopathy; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Animal cell (rolling; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)
- IT Interferons
 RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (α; antibodies and fragments against epitopes present on cancer,
 metastatic or leukemia cells and platelets for diagnosis and therapy of

```
tumor, metastasis, leukemia, autoimmune disease, and inflammation)
ΙT
     442605-19-8
     RL: PRP (Properties)
        (Unclaimed; antibodies and fragments against epitopes present on
        cancer, metastatic or leukemia cells and platelets for diagnosis and
        therapy of tumor, metastasis, leukemia, autoimmune disease, and
        inflammation)
     442598-74-5P
                   442598-75-6P 442598-76-7P 442598-77-8P 442598-81-4P
ΙT
     442598-82-5P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (amino acid sequence; antibodies and fragments against epitopes present
       on cancer, metastatic or leukemia cells and platelets for diagnosis and
       therapy of tumor, metastasis, leukemia, autoimmune disease, and
        inflammation)
ΙT
     212783-31-8
                  268723-76-8
                                268723-77-9
                                              442527-61-9
                                                            442528-29-2
                   442528-31-6 442528-32-7 442528-33-8 442528-34-9
     442528-30-5
     442528-35-0
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies and fragments against epitopes present on cancer,
       metastatic or leukemia cells and platelets for diagnosis and therapy of
       tumor, metastasis, leukemia, autoimmune disease, and inflammation)
     9001-26-7, Prothrombin 9005-49-6, Heparin, biological studies
ΙT
     39346-44-6, Inter-\alpha-trypsin inhibitor 40704-75-4 75037-46-6,
     RL: BSU (Biological study, unclassified); DGN (Diagnostic use); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antibodies and fragments against epitopes present on cancer,
       metastatic or leukemia cells and platelets for diagnosis and therapy of
       tumor, metastasis, leukemia, autoimmune disease, and inflammation)
                                50-35-1, Thalidomide 50-78-2, Aspirin
     50-18-0, Cyclophosphamide
TΤ
                                                  57-22-7, Vincristine
     53-03-2, Prednisone
                         53-86-1, Indomethacin
     58-85-5, Biotin 127-07-1, Hydroxyurea
                                             147-94-4, Cytarabine
                                                                     305-03-3,
                   9004-54-0, Dextran, biological studies 9004-61-9,
     Chlorambucil
                      9013-20-1, Streptavidin 9041-08-1, Dalteparin
    Hyaluronic acid
             10043-66-0, Iodine-131, biological studies 10098-91-6,
     sodium
     Yttrium-90, biological studies 11056-06-7, Bleomycin
                                                             13968-53-1,
     Ruthenium-103, biological studies 13981-56-1, Fluorine-18, biological
              13982-78-0, Mercury-203, biological studies
                                                           14041-48-6,
     studies
    Thulium-165, biological studies
                                     14119-09-6, Gallium-67, biological
              14133-76-7, Technetium-99, biological studies 14158-32-8,
     studies
     Iodine-126, biological studies 14304-79-1, Tellurium-121, biological
                                                             14390-71-7,
              14331-95-4, Ruthenium-105, biological studies
    Tellurium-122, biological studies 14390-73-9, Tellurium-125, biological
              14391-22-1, Thulium-167, biological studies
                                                           14834-67-4,
     Iodine-133, biological studies
                                    14885-78-0, Indium-113, biological
              14900-13-1, Thulium-168, biological studies 14932-42-4,
    Xenon-133, biological studies
                                    15307-86-5, Diclofenac
                                                            15663-27-1,
                   15678-91-8, Krypton-81, biological studies
                                                               15687-27-1,
     cis-Platinum
                15715-08-9, Iodine-123, biological studies
                                                            15750-15-9,
     Indium-111, biological studies
                                     15756-62-4, Ruthenium-95, biological
                                                          15758-35-7,
              15757-14-9, Gallium-68, biological studies
     Ruthenium-97, biological studies
                                       15765-39-6, Bromine-77, biological
              15776-20-2, Bismuth-213, biological studies
                                                            20830-81-3,
                   21679-14-1, Fludarabine
                                             22204-53-1, Naproxen
                             25316-40-9, Adriamycin 30516-87-1, Zidovudine
     23214-92-8, Doxorubicin
                        33369-51-6 35014-81-4, Rhenium-199, biological
     33069-62-4, Taxol
```

```
38194-50-2, Sulindac
                                     51146-56-6, Dexibuprofen
                                                                51633-78-4.
    Mercury-167, biological studies 51692-52-5, Rhenium-201, biological
             51692-56-9, Rhenium-205, biological studies
     studies
                                                            51803-78-2,
     Nimesulide
                  52549-17-4, Pranoprofen
                                           58957-92-9, Idarubicin
     59277-89-3, Acyclovir
                             68206-94-0, Cloricromene
                                                       73963-72-1, Cilostazol
     74397-12-9, Limaprost
                             74711-43-6, Zaltoprofen
                                                      75706-12-6, Leflunomide
     80790-68-7, Morpholinodoxorubicin
                                        82410-32-0, Ganciclovir
     Defibrotide
                  85622-93-1, Temozolomide
                                            90101-16-9, Droxicam
     113440-58-7, Calicheamicin
                                 117989-72-7, Uro-Vaxom
                                                          162011-90-7,
                                         173146-27-5, Denileukin diftitox
                169590-42-5, Celecoxib
     425603-01-6, WinRho SDF
     RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study);
     USES (Uses)
        (antibodies and fragments against epitopes present on cancer,
        metastatic or leukemia cells and platelets for diagnosis and therapy of
        tumor, metastasis, leukemia, autoimmune disease, and inflammation)
IT
     2543-43-3
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (linker polypeptide; antibodies and fragments against
        epitopes present on cancer, metastatic or leukemia cells and platelets
        for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune
        disease, and inflammation)
ΙT
     442598-78-9P
                   442598-80-3P
     RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);
     DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (nucleotide sequence; antibodies and fragments against epitopes present
        on cancer, metastatic or leukemia cells and platelets for diagnosis and
       therapy of tumor, metastasis, leukemia, autoimmune disease, and
        inflammation)
     442605-56-3
ΙT
     RL: PRP (Properties)
        (unclaimed nucleotide sequence; antibodies and fragments against
        epitopes present on cancer, metastatic or leukemia cells and platelets
       for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune
        disease, and inflammation)
                  442604-62-8
                                442604-63-9
                                              442604-64-0
                                                            442604-65-1
IT
     442604-60-6
                                                            442604-70-8
                  442604-67-3
                                442604-68-4
                                              442604-69-5
     442604-66-2
                  442604-72-0
                                442604-73-1
                                              442604-74-2
                                                            442604-75-3
     442604-71-9
                  442604-77-5
                               442604-78-6
                                              442604-79-7
     442604-76-4
                                                            442604-80-0
                               442604-83-3
                                              442604-84-4
     442604-81-1
                  442604-82-2
                                                            442604-85-5
                  442604-87-7
                                              442604-89-9
                                442604-88-8
                                                            442604-90-2
     442604-86-6
                  442604-92-4
                                442604-93-5
                                              442604-94-6
                                                           442604-95-7
     442604-91-3
                  442604-97-9
                                              442604-99-1
     442604-96-8
                               442604-98-0
                                                           442605-00-7
                                              442605-04-1
     442605-01-8
                  442605-02-9
                               442605-03-0
                                                            442605-05-2
     442605-06-3
                  442605-07-4
                               442605-08-5
                                              442605-09-6
                                                           442605-10-9
     442605-11-0
                  442605-12-1
                               442605-13-2
                                              442605-14-3
                                                            442605-15-4
                                                            442605-21-2
     442605-16-5
                  442605-17-6
                               442605-18-7
                                              442605-20-1
     442605-22-3
                  442605-23-4
                               442605-24-5
                                              442605-25-6
                                                            442605-26-7
                  442605-28-9 442605-29-0
                                              442605-30-3
                                                            442605-31-4
     442605-27-8
     442605-32-5
                  442605-33-6 442605-34-7
                                              442605-35-8
                                                            442605-36-9
     442605-37-0
                  442605-38-1 442605-39-2
                                             442605-40-5
     RL: PRP (Properties)
        (unclaimed protein sequence; antibodies and fragments against epitopes
       present on cancer, metastatic or leukemia cells and platelets for
       diagnosis and therapy of tumor, metastasis, leukemia, autoimmune
        disease, and inflammation)
                                245330-86-3
                                              245330-96-5
                                                            245331-07-1
ΙT
     122024-47-9
                  149298-29-3
     245331-15-1
                  245331-22-0
                                245331-32-2
                                              245331-36-6
                                                            245331-39-9
```

```
245331-51-5
               245331-68-4
                             245331-74-2
                                            245332-10-9
                                                           245333-35-1
245333-43-1
              245333-53-3
                             245333-62-4
                                            245333-65-7
                                                           245333-66-8
245333-74-8
               245333-75-9
                             245333-76-0
                                            245333-82-8
                                                           245333-90-8
245333-98-6
               245334-15-0
                             245334-24-1
                                            245334-37-6
                                                           245334-46-7
245334-69-4
                             245334-95-6
               245334-81-0
                                            245335-03-9
                                                           245335-22-2
245335-28-8
               245335-54-0
                             245448-41-3
                                            245448-42-4
                                                           245448-43-5
245448-44-6
               245448-45-7
                             245448-46-8
                                            245448-47-9
                                                           245448-48-0
245448-49-1
              245448-50-4
                             245448-51-5
                                            245448-52-6
                                                           245448-53-7
245448-54-8
              245448-55-9
                             245448-56-0
                                            245448-57-1
                                                           245448-58-2
245448-59-3
              245448-60-6
                             245448-61-7
                                            245448-62-8
                                                           245448-95-7
245448-96-8
              245448-97-9
                             245448-98-0
                                            245448-99-1
                                                           245449-00-7
245449-01-8
              245449-02-9
                             245449-03-0
                                            245449-04-1
                                                           245449-05-2
245449-06-3
              245449-07-4
                             245449-08-5
                                            245449-09-6
                                                           245449-10-9
                             245449-13-2
245449-11-0
              245449-12-1
                                            245449-15-4
                                                           268723-83-7
              442527-50-6
                                            442527-53-9
442527-49-3
                             442527-51-7
                                                           442527-54-0
              442527-56-2
                                            442527-58-4
442527-55-1
                             442527-57-3
                                                           442527-59-5
442527-60-8
              442527-62-0
                             442527-63-1
                                            442527-64-2
                                                           442527-65-3
442527-66-4
              442527-67-5
                             442527-68-6
                                            442527-69-7
                                                           442527-70-0
442527-71-1
              442527-72-2
                             442527-73-3
                                            442527-74-4
                                                           442527-75-5
442527-76-6
              442604-61-7
                             442605-41-6
                                            442605-42-7
                                                           442605-43-8
                                            442605-47-2
442605-44-9
              442605-45-0
                             442605-46-1
                                                           442605-48-3
442605-49-4
              442605-50-7
                             442605-51-8
                                            442605-52-9
                                                           442605-53-0
442605-54-1
              442605-55-2
                             442605-57-4
                                            442701-09-9
RL: PRP (Properties)
```

(unclaimed sequence; antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

IT 53-03-2, Prednisone 9004-61-9, Hyaluronic acid

RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antibodies and fragments against epitopes present on cancer, metastatic or leukemia cells and platelets for diagnosis and therapy of tumor, metastasis, leukemia, autoimmune disease, and inflammation)

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 28 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

```
2002:505406 HCAPLUS
AN
     137:57569
DN
ED
     Entered STN: 05 Jul 2002
TΙ
     Method for treating respiratory disorders associated with pulmonary
     elastic fiber injury using polysaccharides
     Cantor, Jerome O.; Kuo, Jing-Wen; Mihalko, Paul J.; Sachs, Dan; Turino,
IN
     Gerard
PΑ
     USA
SO
     U.S. Pat. Appl. Publ., 39 pp., Cont.-in-part of U.S. Ser. No. 79,209.
     CODEN: USXXCO
DT
     Patent
     English
LA
IC
     ICM A61K031-737
     ICS A61K031-728; A61K031-727; A61K009-00; A61L009-04
NCL
     514054000
1-9 (Pharmacology)
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
                ____
 _____
 US 2002086852 ICM A61K031-737
                ICS
                       A61K031-728; A61K031-727; A61K009-00; A61L009-04
 NCL 514054000
US 2003171332 ECLA A61K031/726
     The present invention relates generally to the field of respiratory
AB
     therapeutics, and in particular to the treatment of disorders of the lung
     matrix caused by damage to the elastic fibers of the lung matrix. More
     specifically, methods and materials are disclosed for the delivery to the
     lungs of polysaccharides, derivs. thereof and/or drug conjugates
     , used in the treatment and/or prevention of pulmonary disorders.
     Chondroitin sulfate A, chondroitin sulfate C, heparan sulfate,
     hyaluronic acid HA 227K, HA 587K and HA 890K all demonstrated
     statistically significant protective effects on Mesogrow-L substrate when
     it was digested with porcine pancreatic elastase that was statistically
     significant. Of the substances tested, heparan sulfate seemed to have the
     greatest protective effect.
     respiratory therapy pulmonary elastic fiber injury polysaccharide;
ST
     chondroitin sulfate protection lung elastic fiber; heparan sulfate
     protection lung elastic fiber; hyaluronate protection lung
     elastic fiber
     Drug delivery systems
IT
        (aerosols, inhalants; method for treating respiratory disorders associated
        with pulmonary elastic fiber injury using polysaccharides)
IT
     Polysaccharides, biological studies
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (binding to elastic fibers; method for treating respiratory disorders
        associated with pulmonary elastic fiber injury using polysaccharides)
IT
     Polysaccharides, biological studies
```

```
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (conjugates, with drugs; method for treating respiratory
        disorders associated with pulmonary elastic fiber injury using
        polysaccharides)
TT
     Organelle
        (elastic fiber; method for treating respiratory disorders associated with
        pulmonary elastic fiber injury using polysaccharides)
     Polysaccharides, biological studies
IΤ
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses) (esters; method for treating respiratory disorders associated with
        pulmonary elastic fiber injury using polysaccharides)
ΙT
     Hydrocarbons, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fluoro, breathable propellant; method for treating respiratory
        disorders associated with pulmonary elastic fiber injury using
        polysaccharides)
ΙT
     Drug delivery systems
        (inhalants; method for treating respiratory disorders associated with
        pulmonary elastic fiber injury using polysaccharides)
IT
     Medical goods
        (inhalers; method for treating respiratory disorders associated with
        pulmonary elastic fiber injury using polysaccharides)
ΙT
     Lung, disease
        (injury, pulmonary elastic fiber injury; method for treating
        respiratory disorders associated with pulmonary elastic fiber injury using
        polysaccharides)
ΙT
     Drug delivery systems
        (liquid instillations; method for treating respiratory disorders associated
        with pulmonary elastic fiber injury using polysaccharides)
ΙT
     Drug delivery systems
     Drugs
     Mammalia
     Respiratory tract, disease
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
ΙT
     Annexins
     Glycosaminoglycans, biological studies
     Interferons
     Interleukin 2
     Prostaglandins
     Surfactant proteins (pulmonary)
     Tumor necrosis factors
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
IT
     Polysaccharides, biological studies
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (modified; method for treating respiratory disorders associated with
        pulmonary elastic fiber injury using polysaccharides)
ΙT
     Acetyl group
     Carboxyl group
        (polysaccharide modified with; method for treating respiratory
        disorders associated with pulmonary elastic fiber injury using
        polysaccharides)
IT
     Oxidizing agents
```

(polysaccharides preventing elastic fiber damage by; method for

```
treating respiratory disorders associated with pulmonary elastic fiber
        injury using polysaccharides)
ΙT
     Enzymes, biological studies
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (polysaccharides preventing elastic fiber damage by; method for
        treating respiratory disorders associated with pulmonary elastic fiber
        injury using polysaccharides)
ΙT
     Drug delivery systems
        (powders, inhalants; method for treating respiratory disorders associated
        with pulmonary elastic fiber injury using polysaccharides)
ΙT
     Emphysema
        (prevention or treatment of; method for treating respiratory disorders
        associated with pulmonary elastic fiber injury using polysaccharides)
TT
     Carbodiimides
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (reaction products with polysaccharide; method for treating respiratory
        disorders associated with pulmonary elastic fiber injury using
        polysaccharides)
ΙT
     Polysaccharides, biological studies
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (sulfated; method for treating respiratory disorders associated with
        pulmonary elastic fiber injury using polysaccharides)
ΤТ
     Respiratory tract
        (system for delivering polysaccharide formulation to; method for
        treating respiratory disorders associated with pulmonary elastic fiber
        injury using polysaccharides)
ΙT
     2321-07-5DP, Fluorescein, conjugates with hyaluronic
     acid 9004-61-9DP, Hyaluronic acid, conjugates
     with fluorescein
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
     9004-61-9, Hyaluronic acid
TΤ
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     PEP (Physical, engineering or chemical process); PYP (Physical process);
     RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); RACT (Reactant or reagent); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
     50-02-2, Dexamethasone 50-02-2D, Dexamethasone, esters
TT
     50-28-2, Estradiol, biological studies
                                            50-96-4, Isoetharine
                     51-30-9, Isoproterenol hydrochloride
                                                            52-53-9, Verapamil
     hydrochloride
     52-88-0, Atropine methyl nitrate 53-06-5, Cortisone
                                                           55-63-0,
                                                                 58-22-0,
     Nitroglycerin
                     57-83-0, Progesterone, biological studies
                    58-55-9, Theophylline, biological studies
                                                                61 - 33 - 6,
     Testosterone
                         87-33-2, Isosorbide dinitrate
     biological studies
                                                          100-33-4, Pentamidine
     134-72-5, Ephedrine sulfate 299-95-6, Isoproterenol sulfate 525-66-6,
     Propranolol
                   616-91-1, n-Acetylcysteine
                                                1397-89-3, Amphotericin B
     1403-66-3, Gentamycin 1406-18-4, Vitamin E 2152-44-5,
     Betamethasone valerate 2644-64-6, Dipalmitoylphosphatidylcholine
     3385-03-3, Flunisolide 4419-39-0, Beclomethasone
     4419-39-0D, Beclomethasone, esters
                                        4537-77-3,
     Dipalmitoylphosphatidylglycerol 5874-97-5, Metaproterenol sulfate
     7279-75-6, Isoetharine mesylate 9001-27-8
                                                   9004-10-8, Insulin,
```

```
biological studies
                          9004-54-0, Dextran, biological studies
                                                                     9005-49-6.
                                   9007-12-9, Calcitonin 9041-92-3
9054-89-1, Superoxide dismutase
     Heparin, biological studies
     9050-30-0, Heparan sulfate
                                                                      11000-17-2,
     Vasopressin
                   11056-06-7, Bleomycin 15687-27-1, Ibuprofen
                                                                     15826-37-6,
                      23031-25-6, Terbutaline 23031-32-5, Terbutaline
     Cromolyn sodium
                                          24967-93-9, Chondroitin sulfate A 25322-46-7, Chondroitin sulfate C
     sulfate
              23214-92-8, Doxorubicin
     24967-94-0, Chondroitin sulfate B
     30392-41-7, Bitolterol mesylate 32986-56-4, Tobramycin
                                                                  33419-42-0,
                51022-70-9, Albuterol sulfate
                                                 62229-50-9, Epidermal growth
     factor
              62571-86-2, Captopril
                                      72332-33-3, Procaterol
                                                                 85637-73-6,
                   139639-23-9, Tissue plasminogen activator
     Atriopeptin
                                                                 439684-78-3
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
     27599-63-9, Fluorescein amine
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
     9004-06-2, Elastase
ΙT
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (pancreatic or neutrophil, hyaluronic acid effect on
        emphysema induced by; method for treating respiratory disorders associated
        with pulmonary elastic fiber injury using polysaccharides)
ΙT
     9004-61-9DP, Hyaluronic acid, conjugates with
     fluorescein
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
     9004-61-9 HCAPLUS
RN
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT
     9004-61-9, Hyaluronic acid
     RL: BSU (Biological study, unclassified); PAC (Pharmacological activity);
     PEP (Physical, engineering or chemical process); PYP (Physical process);
     RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); RACT (Reactant or reagent); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
     9004-61-9 HCAPLUS
RN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     50-02-2, Dexamethasone 50-02-2D, Dexamethasone, esters
     53-06-5, Cortisone 2152-44-5, Betamethasone valerate
     3385-03-3, Flunisolide 4419-39-0, Beclomethasone
     4419-39-0D, Beclomethasone, esters
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (method for treating respiratory disorders associated with pulmonary
        elastic fiber injury using polysaccharides)
RN
     50-02-2 HCAPLUS
     Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-,
CN
     (11\beta, 16\alpha) - (9CI) (CA INDEX NAME)
```

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-06-5 HCAPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 2152-44-5 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,21-dihydroxy-16-methyl-17-[(1-oxopentyl)oxy]-, (11 β ,16 β)- (9CI) (CA INDEX NAME)

RN 3385-03-3 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 6-fluoro-11,21-dihydroxy-16,17-[(1-methylethylidene)bis(oxy)]-, $(6\alpha,11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 4419-39-0 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-chloro-11,17,21-trihydroxy-16-methyl-, $(11\beta,16\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 4419-39-0 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-chloro-11,17,21-trihydroxy-16-methyl-, (11β,16β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46

```
ΑN
     2002:72183 HCAPLUS
DN
     136:123686
ED
     Entered STN: 25 Jan 2002
TΙ
     Preparation of polysaccharide-based hydrogel films
     Luo, Yi; Prestwich, Glenn D.; Kirker, Kelly R.
IN
PA
     University of Utah Research Foundation, USA
     PCT Int. Appl., 92 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM C08G063-48
     ICS C08G063-91; A61K009-14
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 33, 37
FAN.CNT 1
     PATENT NO.
                           KIND
                                   DATE
                                                APPLICATION NO.
                                                                          DATE
     _____
                           ____
                                   -----
                                                 -----
                                               WO 2001-US22556
     WO 2002006373
                                   20020124
                                                                          20010717
PΙ
                            Α1
              AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
              RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
                                                                       TD, TG
                                              CA 2001-2416698
     CA 2416698
                                   20020124
                                                                          20010717
                            AA
                                               EP 2001-957173
     EP 1305355
                                   20030502
                                                                          20010717
                            Α1
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI US 2000-218725P
                           P
                                   20000717
     WO 2001-US22556
                            W
                                   20010717
CLASS
                          PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                  CLASS
                  ____
WO 2002006373
                  ICM
                          C08G063-48
                   ICS
                          C08G063-91; A61K009-14
     The present invention provides improved hydrogel films useful for the
     therapeutic treatment. The invention also provides materials and methods
     for modification and polymerization of polysaccharides into hydrogel films,
which
```

ANSWER 29 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

Cordero-Garcia PCT/US03/26233

swell after exposure to a neutral aqueous solution. The methods may include modification of a polysaccharide having at least 1 carboxylic acid group into a polysaccharide dihydrazide derivative, which is then crosslinked with a polyaldehyde to create a hydrogel film. The invention also relates to pharmaceutical compns. composed of a pharmaceutical and a hydrogel film of the invention. Hyaluronic acid was treated with adipic dihydrazide (ADH) followed by the reaction with PEG-dialdehyde. Hydrogel films were successfully produced when the crosslinking agent (PEG-dialdehyde) was used in a molar ratio of 0.25, 0.5, and 1 relative to ADH. polysaccharide adipic hydrazide PEG hydrogel prepn ST Peptides, biological studies TΤ RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (agonists; preparation of polysaccharide-based hydrogel films) ΙT Antibodies and Immunoglobulins RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (conjugates, with toxins; preparation of polysaccharide-based hydrogel films) Medical goods TT (dressings; preparation of polysaccharide-based hydrogel films) ΤТ Viscosity (enhancing agent; preparation of polysaccharide-based hydrogel films) IT Drug delivery systems (hydrogels; preparation of polysaccharide-based hydrogel films) IT Anesthetics (local; preparation of polysaccharide-based hydrogel films) Adhesion, biological ΤТ Adrenoceptor agonists Analgesics Anti-inflammatory agents Antibacterial agents Anticonvulsants Antipyretics Antitumor agents Antiulcer agents Antiviral agents Buffers Cardiovascular agents Contraceptives Crosslinking agents Elasticity Elongation, mechanical Fungicides Hypnotics and Sedatives Muscle relaxants Skin Tensile strength Vaccines Wound healing (preparation of polysaccharide-based hydrogel films) Bone morphogenetic proteins ΤТ Fibronectins Growth factors, animal Hormones, animal, biological studies Interleukin 1 Oligonucleotides Platelet-derived growth factors Steroids, biological studies Tumor necrosis factors

Cordero-Garcia PCT/US03/26233

```
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (preparation of polysaccharide-based hydrogel films)
IT
     Glycosaminoglycans, biological studies
     Polysaccharides, biological studies
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (reaction products with polyoxyalkylenes; preparation of
        polysaccharide-based hydrogel films)
IT
     Dialdehydes
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (reaction products with polysaccharides; preparation of polysaccharide-based
        hydrogel films)
ΙT
     Muscle relaxants
        (spasmolytics; preparation of polysaccharide-based hydrogel films)
ΙT
     Contraceptives
        (spermicidal; preparation of polysaccharide-based hydrogel films)
ΙT
     Transforming growth factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\alpha-; preparation of polysaccharide-based hydrogel films)
ΙT
     Adrenoceptor antagonists
        (\beta-; preparation of polysaccharide-based hydrogel films)
IT
     Transforming growth factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (β-; preparation of polysaccharide-based hydrogel films)
     1071-93-8DP, Adipic dihydrazide, reaction products polysaccharides
IT
     9004-61-9DP, Hyaluronic acid, derivs., reaction products
     with polyoxyalkylenes 9007-28-7DP, Chondroitin sulfate, derivs.,
                                               9067-32-7DP, Sodium
     reaction products with polyoxyalkylenes
     Hyaluronate, derivs., reaction products with polyoxyalkylenes
     24967-93-9DP, Chondroitin 4-sulfate, derivs., reaction products with
                        25322-46-7DP, Chondroitin 6-sulfate, derivs., reaction
     polyoxyalkylenes
                                      151709-76-1P
     products with polyoxyalkylenes
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (preparation of polysaccharide-based hydrogel films)
     50-02-2, Dexamethasone 50-22-6, Corticosterone
IT
     50-23-7, Hydrocortisone 50-24-8, Prednisolone
                                                     50-36-2,
                                         51-61-6, Dopamine, biological studies
              51-21-8, 5-Fluorouracil
     53-03-2, Prednisone 53-06-5, Cortisone
                                              53-86-1,
                                          57-27-2, Morphine, biological
                    54-05-7, Chloroquine
     Indomethacin
               57-83-0, Progesterone, biological studies
                                                          58-22-0,
     studies
                    58-55-9, Theophylline, biological studies
                                                                58-73-1,
     Testosterone
     Diphenhydramine
                       58-74-2, Papaverine
                                             59-05-2, Methotrexate
                                                                    59-67-6,
                                 60-54-8, Tetracycline
                                                          61-33-6, biological
     Niacin, biological studies
               69-72-7, Salicylic acid, biological studies
                                                             71-81-8,
     studies
     Isopropamide iodide 83-43-2, 6\alpha-Methylprednisolone
     92-13-7, Pilocarpine 94-09-7, Benzocaine
                                                 103-90-2, Acetaminophen
     137-58-6, Lidocaine
                           317-34-0, Aminophylline
                                                     465-65-6, Naloxone
                             865-21-4, Vinblastine
                                                     1403-66-3, Gentamycin
     564-25-0, Doxycycline
                             4146-43-4D, Butanedioic acid dihydrazide, reaction
     1405-87-4, Bacitracin
                                5104-49-4, Flurbiprofen
                                                          5536-17-4, Vidarabine
     products polysaccharides
     5874-97-5, Metaproterenol sulfate
                                         9000-11-7D, Carboxymethyl cellulose,
     derivs., reaction products with polyoxyalkylenes
                                                        9000-69-5D, Pectin,
     derivs., reaction products with polyoxyalkylenes
                                                        9002-01-1,
     Streptokinase
                     9002-68-0, Follicle stimulating hormone
                                                                9002-72-6,
                                                              9005-32-7D,
                    9004-10-8, Insulin, biological studies
     Somatotropin
     Alginic acid, derivs., reaction products with polyoxyalkylenes
     9005-49-6D, Heparin, derivs., reaction products with polyoxyalkylenes
```

9050-30-0D, Heparan sulfate, derivs., reaction products with polyoxyalkylenes 11111-12-9, Cephalosporin 15307-79-6, Diclofenac sodium 15663-27-1, Cisplatin 15687-27-1, Ibuprofen 16590-41-3, 20247-84-1D, Suberic acid dihydrazide, reaction products Naltrexone 22204-53-1, Naproxen 24967-94-0D, Dermatan sulfate, polysaccharides derivs., reaction products with polyoxyalkylenes 25316-40-9, Adriamycin 36322-90-4, Piroxicam 38304-91-5, Minoxidil 52485-79-7, Buprenorphine 61912-98-9, Insulin-like growth factor 62031-54-3, Fibroblast growth 62229-50-9, Epidermal growth factor factor 62683-29-8, Colony stimulating factor 70226-44-7D, Heparan, derivs., reaction products with 75634-40-1D, Dermatan, derivs., reaction products with 106096-93-9, Basic Fibroblast growth factor polyoxyalkylenes polyoxyalkylenes 106266-06-2, Risperidone RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of polysaccharide-based hydrogel films) RE.CNT THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD (1) Bergstrom; US 5242828 A 1993 HCAPLUS (2) Everhart; US 6180288 B1 2001 HCAPLUS (3) Malmqvist; US 5492840 A 1996 HCAPLUS 9004-61-9DP, Hyaluronic acid, derivs., reaction products with polyoxyalkylenes RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of polysaccharide-based hydrogel films) 9004-61-9 HCAPLUS Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) *** STRUCTURE DIAGRAM IS NOT AVAILABLE *** 50-02-2, Dexamethasone 50-22-6, Corticosterone 50-23-7, Hydrocortisone 50-24-8, Prednisolone 53-03-2, Prednisone 53-06-5, Cortisone 83-43-2 , 6α -Methylprednisolone RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of polysaccharide-based hydrogel films)

Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-,

Absolute stereochemistry.

50-02-2 HCAPLUS

 $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

RF.

RN

CN

ΙT

RN

CN

RN 50-22-6 HCAPLUS Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11β)- (9CI) (CA INDEX CN NAME)

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-24-8 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

RN 53-06-5 HCAPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 83-43-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-6-methyl-, $(6\alpha,11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 30 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:31914 HCAPLUS

DN 136:98820

ED Entered STN: 11 Jan 2002

TI Yeast three-hybrid system for in vivo drug screening and enzyme evolution

```
using chemical inducers of dimerization
ΙN
     Cornish, Virginia W.
PΑ
     USA
SO
     U.S. Pat. Appl. Publ., 48 pp., Cont.-in-part of U.S. Ser. No. 490,320.
     CODEN: USXXCO
DT
     Patent
LA
     English
     ICM C12Q001-68
ICS C07J043-00
IC
NCL
     435006000
CC
     9-2 (Biochemical Methods)
     Section cross-reference(s): 3, 7
FAN.CNT 2
                                DATE APPLICATION NO. DATE
     PATENT NO.
                         KIND
     -----
PI US 2002004202 A1
US 2004106154 A1
PRAI US 2000-490320 A2
US 2001-768479 A3
                         ____
                                20020110 US 2001-768479 20010124
20040603 US 2003-705644 20031110
                                20000124
                                20010124
CLASS
             CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 ______
               ICM
                        C120001-68
 US 2002004202
                 ICS
                        C07J043-00
                 NCL
                        435006000
 US 2002004202 ECLA C07K005/06H; C07K019/00 US 2004106154 ECLA C07K005/06H; C07K019/00; G01N033/542
     The disclosed invention relates to the evolution of enzymes in vivo, and
     drug screening in vivo through the use of chemical inducers of protein
     dimerization. The subject invention provides a compound having the formula:
     H1--X--B-Y--H2 wherein each of H1 and H2 may be the same or different and
     capable of binding to a receptor which is the same or different; wherein
     each of X and Y may be present or absent and if present, each may be the
     same or different spacer moiety; and wherein B is an enzyme cleavable
     moiety. This invention also provides a method of screening proteins for
     the ability to catalyze bond cleavage or bond formation, comprising the
     steps of: (a) providing a cell that expresses a pair of fusion proteins
     which upon dimerization change a cellular readout; (b) providing the
     compound of the invention which dimerizes the pair of fusion proteins, said
     compound comprising two portions coupled by a bond that is cleavable or
     formed by the protein to be screened; and (c) screening for the cellular
     readout, wherein a change the cellular readout indicates catalysis of bond
     cleavage or bond formation by the protein to be screened. However, it has
     not heretofore been suggested to use small mol. induced protein
     dimerization to screen for catalysis in vivo., and specifically, it has
     not been suggested to use an enzyme cleavable moiety to link two mols. to
     dimerize proteins. This invention provides proteins de novo with
     prescribed binding and catalytic properties and permits screening cDNA
     libraries based on biochem. function. Practically, we believe that
     powerful screens in combination with existing randomization techniques
     will make it possible to take an existing protein fold and evolve it into
     an enzyme with a new function generating useful catalysts for the
     pharmaceutical and chemical industries. Since the screen is done in vivo and
     in both prokaryotes and eukaryotes, the methodol. can be applied to
     functional genomics and drug discovery. A new chemical inducer of
     dimerization (CID) was recently developed in Professor Cornish's lab,
     which uses a heterodimer of methotrexate (MTX) and dexamethasone (DEX)
     which, when placed in the yeast three-hybrid system, reconstitutes
     transcription of the lacZ gene. The effects of altering the structure of
```

the DEX-MTX CID and the protein chimeras in the three-hybrid assay were investigated. It was observed that all DEX-MTX CIDs, except the DEX-MTX CID with the shortest chemical linker, showed the ability to induce β -galactosidase levels at levels 400% above strains possessing no CID. The DEX-MTX CIDs showed little or no increase in β -galactosidase levels above background levels in strains where dihydrofolate reductase (DHFR) from E. coli was replaced by DHFR from murine. The three-hybrid system did show some directional preference to the way in which the receptors where fused to the DNA binding domain and the activation domain. These studies have led to a better understanding of the factors that are important in activating transcription in the DEX-MTX yeast three-hybrid system.

- ST yeast three hybrid enzyme drug screening dimerization chem inducer; methotrexate dexamethasone heterodimer dimerization inducer enzyme drug screening
- IT Proteins

RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(B42; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Cytometry

(FACS (fluorescence-activated cell sorting), use in screening; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Immunophilins

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(FKBP-12 (FK 506-binding protein, 12 kDa), use in fusion proteins; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond cleavage

(P-N, S-N; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization) ${\sf S}$

IT Transcriptional regulation

(activation, inducer; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Functional groups

(alkoxycarbonyl groups, enzyme cleavable moiety; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Transcription, genetic

(anal. of, use in screening; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Antibiotics

Drugs

(binding to a receptor, use in protein dimerization inducer; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Carbohydrates, biological studies

Hormones, animal, biological studies

Steroids, biological studies

Tetracyclines

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(binding to a receptor, use in protein dimerization inducer; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond formation

Cordero-Garcia PCT/US03/26233

(carbon-carbon, ligase catalyzing; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond cleavage

(carbon-carbon; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond formation

(carbon-nitrogen, ligase catalyzing; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond cleavage

(carbon-nitrogen; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond formation

(carbon-oxygen, ligase catalyzing; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond formation

(carbon-phosphorus, ligase catalyzing; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond cleavage

(carbon-phosphorus; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond formation

(carbon-sulfur, ligase catalyzing; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Receptors

RL: BSU (Biological study, unclassified); BIOL (Biological study) (compound capable of binding to; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Bond cleavage

Bond formation

(enzyme capable of, screening for; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Claisen rearrangement

Diels-Alder reaction

(enzyme catalyzing, screening of; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Amide group

(enzyme cleavable moiety; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

RL: BSU (Biological study, unclassified); BIOL (Biological study) (enzyme cleavable moiety; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Proteins

IT

RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(green fluorescent, gene transcription marker; yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT Escherichia coli

Prokaryota

```
Saccharomyces cerevisiae
     Yeast
        (host for screening; yeast three-hybrid system for in vivo drug
        screening and enzyme evolution using chemical inducers of dimerization)
IT
     Aldehydes, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (hydroxy, enzyme cleavable moiety; yeast three-hybrid system for in
        vivo drug screening and enzyme evolution using chemical inducers of
        dimerization)
     Enzymes, biological studies RL: BSU (Biological study, unclassified); BUU (Biological use,
ΙT
     unclassified); BIOL (Biological study); USES (Uses)
        (inhibitors, binding to a receptor, use in protein dimerization
        inducer; yeast three-hybrid system for in vivo drug screening and
        enzyme evolution using chemical inducers of dimerization)
IΤ
     Gene, microbial
     RL: ARU (Analytical role, unclassified); BUU (Biological use,
     unclassified); ANST (Analytical study); BIOL (Biological study); USES
        (lacZ; yeast three-hybrid system for in vivo drug screening and enzyme
        evolution using chemical inducers of dimerization)
     Transcription factors
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (lexA, use in fusion proteins; yeast three-hybrid system for in vivo
        drug screening and enzyme evolution using chemical inducers of
        dimerization)
     Nuclear receptors
IT
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (ligands for; yeast three-hybrid system for in vivo drug screening and
        enzyme evolution using chemical inducers of dimerization)
IT
        (mammalian, host for screening; yeast three-hybrid system for in vivo
        drug screening and enzyme evolution using chemical inducers of
        dimerization)
IT
     Evolution
        (mol., directed, of enzyme; yeast three-hybrid system for in vivo drug
        screening and enzyme evolution using chemical inducers of dimerization)
ΙT
     Functional groups
        (phosphodiester, enzyme cleavable moiety; yeast three-hybrid system for
        in vivo drug screening and enzyme evolution using chemical inducers of
        dimerization)
IT
     Combinatorial library
     cDNA library
        (screening of; yeast three-hybrid system for in vivo drug screening and
        enzyme evolution using chemical inducers of dimerization)
IT
     Bond cleavage
        (sulfur-sulfur; yeast three-hybrid system for in vivo drug screening
        and enzyme evolution using chemical inducers of dimerization)
ΙT
     Aldehydes, biological studies
     Ketones, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (transferase specific to; yeast three-hybrid system for in vivo drug
        screening and enzyme evolution using chemical inducers of dimerization)
IΤ
     Glucocorticoid receptors
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
```

(use in fusion proteins; yeast three-hybrid system for in vivo drug

(Uses)

Cordero-Garcia PCT/US03/26233

```
screening and enzyme evolution using chemical inducers of dimerization)
IT
     Biomarkers (biological responses)
     Dimerization
     Dimerization catalysts
     Drug screening
     Molecular association
     Panning
        (yeast three-hybrid system for in vivo drug screening and enzyme
        evolution using chemical inducers of dimerization)
    Enzymes, analysis
RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical
ΙT
     study); BIOL (Biological study)
        (yeast three-hybrid system for in vivo drug screening and enzyme
        evolution using chemical inducers of dimerization)
ΙT
     Reporter gene
     RL: ARU (Analytical role, unclassified); BUU (Biological use,
     unclassified); ANST (Analytical study); BIOL (Biological study); USES
     (Uses)
        (yeast three-hybrid system for in vivo drug screening and enzyme
        evolution using chemical inducers of dimerization)
     Fusion proteins (chimeric proteins)
TΤ
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (yeast three-hybrid system for in vivo drug screening and enzyme
        evolution using chemical inducers of dimerization)
     9031-11-2, \beta-Galactosidase
     RL: ARU (Analytical role, unclassified); BUU (Biological use,
     unclassified); ANST (Analytical study); BIOL (Biological study); USES
        (LacZ-, gene transcription marker; yeast three-hybrid system for in
        vivo drug screening and enzyme evolution using chemical inducers of
        dimerization)
     58-85-5, Biotin
                       60-54-8, Tetracycline
                                               63-42-3, Lactose
     trans-Retinoic acid 6893-02-3, 3,5,3'-Triiodothyronine 78040-85-4,
     Coumermycin
     RL: BSU (Biological study, unclassified); BUU (Biological use,
     unclassified); BIOL (Biological study); USES (Uses)
        (binding to a receptor, use in protein dimerization inducer; yeast
        three-hybrid system for in vivo drug screening and enzyme evolution
        using chemical inducers of dimerization)
                             9073-60-3, \beta-Lactamase
ΙT
     9014-00-0, Luciferase
     RL: ARU (Analytical role, unclassified); BUU (Biological use,
     unclassified); ANST (Analytical study); BIOL (Biological study); USES
     (Uses)
        (gene transcription marker; yeast three-hybrid system for in vivo drug
        screening and enzyme evolution using chemical inducers of dimerization)
ΙT
     11111-12-9, Cephalosporin
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (hydrolysis by a cephalosporinase; yeast three-hybrid system for in
        vivo drug screening and enzyme evolution using chemical inducers of
        dimerization)
     9002-03-3, Dihydrofolate reductase
ΙT
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (use in fusion proteins; yeast three-hybrid system for in vivo drug
        screening and enzyme evolution using chemical inducers of dimerization)
                           9013-79-0, Esterase
                                                   9027-41-2, Hydrolase
     9013-19-8, Isomerase
IT
     9031-56-5, Ligase 9031-96-3, Peptide hydrolase 9032-92-2, Glycosidic
                9033-07-2, Glycosyl transferase 9047-03-4, Alkyl transferase
     hydrolase
```

9047-56-7, Mutase 9047-61-4, Transferase 9054-54-0, Acyl transferase 9055-04-3, Lyase 9055-15-6, Oxidoreductase 9080-22-2, Racemase 37342-00-0, Epimerase 389084-88-2, Aryltransferase 389085-02-3, Ether hydrolase 389085-30-7, Acid anhydride hydrolase RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)

(yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT 282092-90-4 351419-43-7 351419-44-8 389085-33-0 389085-34-1 389085-35-2 389085-36-3 389085-38-5 389085-39-6 389085-40-9 RL: ARU (Analytical role, unclassified); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT 50-02-2D, Dexamethasone, conjugates with receptor ligands 59-05-2D, Methotrexate, conjugates with receptor ligands 104987-11-3D, FK506, conjugates with receptor ligands RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

IT 50-02-2D, Dexamethasone, conjugates with receptor

ligands

RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(yeast three-hybrid system for in vivo drug screening and enzyme evolution using chemical inducers of dimerization)

RN 50-02-2 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 31 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:924633 HCAPLUS

DN 136:161532

ED Entered STN: 23 Dec 2001

TI Dextran-methylprednisolone succinate as a prodrug of methylprednisolone: plasma and tissue disposition

AU Zhang, Xiaoping; Mehvar, Reza

CS School of Pharmacy, Texas Tech University Health Science Center, Amarillo, TX, 79106, USA

SO Journal of Pharmaceutical Sciences (2001), 90(12), 2078-2087 CODEN: JPMSAE; ISSN: 0022-3549

Wiley-Liss, Inc.

PΒ

```
DT
     Journal
     English
LA
CC
     2-4 (Mammalian Hormones)
     Plasma and tissue disposition of a macromol. prodrug of methylprednisolone
AΒ
     (MP), dextran (70 kDa)-methylprednisolone succinate (DMP), was
     studied in rats. Single 5-mg/kg doses of DMP or unconjugated MP were
     administered into the tail veins of different groups of rats. Blood (cardiac puncture) and tissues (liver, spleen, kidney, heart, lung,
     thymus, and brain) were collected at various times after DMP (0-96 h) or
     MP (0-2\ h) injections. Concns. of DMP and MP in samples were analyzed by size-exclusion chromatog. (SEC) and reversed-phase HPLC, resp.
     Conjugation of MP with 70-kDa dextran resulted in 22-,
     300-, and 30-fold decreases in the steady-state volume of distribution,
     clearance, and terminal plasma rate constant of the steroid, resp. As for
     tissue distribution, the conjugate delivered the steroid
     primarily to the spleen and liver as indicated by 19- and 3-fold
     increases, resp., in the tissue/plasma area under the curve (AUC) ratios
     of the steroid. On the other hand, the tissue/plasma AUC ratios of the
     prodrug in other organs were negligible. Active MP was released from DMP
     slowly in the spleen and liver, and AUCs of the regenerated MP in these \,
     tissues were 55- and 4.8-fold, resp., higher than those after the
     administration of the parent drug. In contrast, no parent drug was
     detected in the plasma of DMP-injected rats. These results indicate that
     DMP may be useful for the targeted delivery of MP to the spleen and liver
     where the active drug is slowly released.
     dextran methylprednisolone succinate prodrug blood tissue disposition
ST
IT
     Blood
     Brain
     Heart
     Kidney
     Liver
     Lung
     Spleen
     Thymus gland
        (dextran-methylprednisolone succinate as prodrug of methylprednisolone
        and its plasma and tissue disposition)
IT
     Drug delivery systems
        (prodrugs; dextran-methylprednisolone succinate as prodrug of
        methylprednisolone and its plasma and tissue disposition)
ΙT
     2921-57-5, Methylprednisolone succinate 2921-57-5D,
     Methylprednisolone succinate, -dextran conjugate
                                                           9004-54-0D,
     Dextran, -methylprednisolone succinate conjugate
     RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL
     (Biological study)
         (dextran-methylprednisolone succinate as prodrug of methylprednisolone
        and its plasma and tissue disposition)
              THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 37
(1) Asfar, S; Transplantation 1996, V61, P1377 MEDLINE
(2) Bailer, A; J Pharmacokinet Biopharm 1988, V16, P303 MEDLINE
(3) Bernareggi, A; J Pharmacokinet Biopharm 1991, V19, P21 HCAPLUS
(4) Binder, J; Transplant Proc 1998, V30, P1051 HCAPLUS
(5) Binder, R; Transplantation 1994, V58, P633
(6) Davies, B; Pharm Res 1993, V10, P1093 MEDLINE
(7) Girardin, C; Transplantation 1996, V62, P1377 MEDLINE
(8) Gruber, S; Immunol Rev 1992, V129, P5 HCAPLUS
(9) Gruber, S; Transplantation 1992, V54, P1 MEDLINE
(10) Hashida, M; Drug Metab Dispos 1984, V12, P492 HCAPLUS
```

- (11) Haughey, D; J Chromatogr, Biomed Appl 1988, V430, P241 HCAPLUS
- (12) Jusko, W; Applied pharmacokinetics: Principles of therapeutic drug monitoring, third ed 1992, P27-1
 (13) Kahan, B; Transplant Proc 1985, V17, P303 MEDLINE
 (14) Kong, A; J Pharm Sci 1991, V80, P409 HCAPLUS

- (15) Larsen, C; Adv Drug Deliv Rev 1989, V3, P103 HCAPLUS (16) Matsumoto, S; Cancer Res 1986, V46, P4463 HCAPLUS
- (17) McLeod, A; Biopharm Drug Dispos 1994, V15, P151 HCAPLUS
- (18) McLeod, A; Int J Pharm 1993, V92, P105 HCAPLUS
- (19) Mehvar, R; J Chromatogr B 2000, V744, P293 HCAPLUS
- (20) Mehvar, R; J Controlled Release 2000, V69, P1 HCAPLUS
- (21) Mehvar, R; J Controlled Release 2000, V68, P53 HCAPLUS
- (22) Mehvar, R; J Pharm Biomed Anal 1999, V19, P785 HCAPLUS
 (23) Mehvar, R; J Pharm Biomed Anal 2000, V22, P1015 HCAPLUS
- (24) Mehvar, R; J Pharm Sci 1992, V81, P908 HCAPLUS (25) Mehvar, R; J Pharm Sci 1994, V83, P1495 HCAPLUS
- (26) Mishina, E; J Pharmacol Exp Ther 1994, V271, P868 HCAPLUS (27) Mishina, E; Pharm Res 1993, V10, P1402 HCAPLUS (28) Mishina, E; Pharm Res 1994, V11, P848 HCAPLUS (29) Mishina, E; Pharm Res 1996, V13, P141 HCAPLUS

- (30) Mishina, E; Res Commun Chem Pathol Pharmacol 1994, V84, P47 HCAPLUS
- (31) Rensberger, K; Int J Pharm 2000, V207, P71 HCAPLUS
- (32) Rosenfeld, E; Clin Chim Acta 1957, V2, P105 HCAPLUS
- (33) Takakura, Y; Pharm Res 1987, V4, P293 HCAPLUS (34) Takakura, Y; Pharm Res 1990, V7, P339 HCAPLUS
- (35) Thoren, L; Develop Biol Stand 1981, V48, P157 HCAPLUS
- (36) Yuan, J; J Pharm Sci 1993, V82, P761 MEDLINE
- (37) Yura, H; J Controlled Release 1999, V57, P87 HCAPLUS
- 2921-57-5, Methylprednisolone succinate 2921-57-5D, ΤТ Methylprednisolone succinate, -dextran conjugate RL: BSU (Biological study, unclassified); PKT (Pharmacokinetics); BIOL (Biological study)

(dextran-methylprednisolone succinate as prodrug of methylprednisolone and its plasma and tissue disposition)

- RN 2921-57-5 HCAPLUS
- Pregna-1, 4-diene-3, 20-dione, 21-(3-carboxy-1-oxopropoxy)-11, 17-dihydroxy-6-CN methyl-, $(6\alpha, 11\beta)$ - (9CI)(CA INDEX NAME)

- RN 2921-57-5 HCAPLUS
- CN Pregna-1,4-diene-3,20-dione, 21-(3-carboxy-1-oxopropoxy)-11,17-dihydroxy-6-

methyl-, $(6\alpha, 11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
L46
    ANSWER 32 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
```

AN 2001:903815 HCAPLUS

DN 136:42842

ED Entered STN: 14 Dec 2001

Treating respiratory disorders associated with pulmonary elastic fiber injury with polysaccharides

ΙN Cantor, Jerome; Kuo, Jing Wen; Milhalko, Paul J.; Sachs, Dan; Torino, Gerard

The Trustees of Columbia University In the City of New York, USA; Exhale PΑ Therapeutics, Inc.

PCT Int. Appl., 80 pp. SO

CODEN: PIXXD2

DTPatent

LA English

IC

ICM A61K031-00 63-6 (Pharmaceuticals) CC

Section cross-reference(s): 1

| FAN.CNT 5 | | | | | | | | | | | | | | | | | | |
|-----------|------------|---------------|-----|-----|-------------|-------------|------|----------|-----------------|-----------------|-----|-----|-----|------|----------|----------|-----|-----|
| | PATENT NO. | | | | KIND | | DATE | | APPLICATION NO. | | | | | DATE | | | | |
| PI | WO | WO 2001093846 | | | | A2 | - | 20011213 | | WO 2001-US16589 | | | | | | | | |
| | WO | 2001093846 | | | A3 20020523 | | | | | | | | | | | | | |
| | | W: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, |
| | | | HR, | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | LS, |
| | | | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | ΝZ, | PL, | PT, | RO, |
| | | | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | ΤZ, | UA, | UG, | UZ, | VN, |
| | | | YU, | ZA, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | TM | | | | |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZW, | AT, | BE, | CH, | CY, |
| | | | DE, | DK, | ES, | FI, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | TR, | BF, |
| | | | ВJ, | CF, | CG, | CI, | CM, | GΑ, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | ΤG | | |
| | CA 2438656 | | | | AA 20020822 | | | | CA 2001-2438656 | | | | | | 20010214 | | | |
| | WO | WO 2002064149 | | | | A1 20020822 | | | | WO 2001-US40105 | | | | | | 20010214 | | |
| | | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH, | CN, |
| | | | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EE, | ES, | FI, | GB, | GD, | GE, | GH, | GM, | HR, |
| | | | HU, | ID, | IL, | IN, | IS, | JP, | ΚE, | KG, | ΚP, | KR, | ΚZ, | LC, | LK, | LR, | LS, | LT, |
| | | | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NO, | NZ, | PL, | PT, | RO, | RU, |

```
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
              ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
              BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1379256
                                  20040114
                            Α1
                                              EP 2001-923276
                                                                        20010214
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     CA 2410577
                            AA
                                  20011213
                                               CA 2001-2410577
                                                                        20010523
     EP 1292314
                            Α2
                                  20030319
                                               EP 2001-939283
                                                                        20010523
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
         R:
     JP 2004513071
                           Т2
                                  20040430
                                               JP 2002-501419
                                                                        20010523
PRAI US 2000-206612P
                            Ρ
                                  20000523
     WO 2001-US40105
                           W
                                  20010214
     WO 2001-US16589
                           W
                                  20010523
CLASS
 PATENT NO.
                  CLASS
                         PATENT FAMILY CLASSIFICATION CODES
                  ____
 WO 2001093846
                  ICM
                          A61K031-00
 JP 2004513071
                  FTERM
                          4C076/AA24; 4C076/AA93; 4C076/BB27; 4C076/CC04;
                          4C076/CC15; 4C076/CC27; 4C076/CC32; 4C076/CC34;
                          4C076/CC35; 4C076/FF34; 4C076/FF68; 4C086/AA01;
                          4C086/AA02; 4C086/EA20; 4C086/EA25; 4C086/EA26;
                          4C086/EA27; 4C086/MA01; 4C086/MA02; 4C086/MA04;
                          4C086/MA13; 4C086/MA56; 4C086/NA14; 4C086/ZA59;
                          4C086/ZA60; 4C086/ZA61; 4C086/ZB11; 4C086/ZB21;
                          4C086/ZB26; 4C086/ZB32; 4C090/AA09; 4C090/BA12;
                          4C090/BA62; 4C090/BA66; 4C090/BA67; 4C090/BA68;
                          4C090/BD02; 4C090/BD22; 4C090/BD24; 4C090/BD37;
                          4C090/DA09; 4C090/DA23
AB
     The present invention relates generally to the field of respiratory
     therapeutics, and in particular to the treatment of disorders of the lung
     matrix caused by damage to the elastic fibers of the lung matrix. More
     specifically, methods and materials are disclosed for the delivery to the
     lungs of polysaccharides, derivs. thereof and/or drug conjugates
     , used in the treatment and/or prevention of pulmonary disorders.
     Examples are given for the effect of hyaluronic acid on
     pulmonary emphysema induced by pancreatic elastase, and neutrophil
     elastase.
ST
     polysaccharide respiratory disorder treatment
ΙT
     Medical goods
         (inhalers; treating respiratory disorders associated with pulmonary
        elastic fiber injury with polysaccharides)
IT
     Muscle
         (respiratory; treating respiratory disorders associated with pulmonary
        elastic fiber injury with polysaccharides)
ΙT
     Drug delivery systems
         (sprays; treating respiratory disorders associated with pulmonary elastic
        fiber injury with polysaccharides)
ΙT
     Particle size
     Respiratory tract, disease
         (treating respiratory disorders associated with pulmonary elastic fiber
        injury with polysaccharides)
IT
     Annexins
     Tumor necrosis factors
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (treating respiratory disorders associated with pulmonary elastic fiber
```

```
injury with polysaccharides)
ΙT
     Glycosaminoglycans, biological studies
     Polysaccharides, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treating respiratory disorders associated with pulmonary elastic fiber
        injury with polysaccharides)
                              50-28-2, Estradiol, biological studies
ΙT
     50-02-2, Dexamethasone
     50-96-4, Isoetharine hydrochloride 51-30-9, Isoproterenol hydrochloride
     52-53-9, Verapamil 52-88-0, Atropine methyl nitrate 53-06-5,
                 55-63-0, Nitroglycerin 57-83-0, Progesterone, biological
     Cortisone
              58-22-0, Testosterone
                                     58-55-9, Theophylline, biological
     studies
               87-33-2, Isosorbide dinitrate 100-33-4, Pentamidine
     studies
                                   299-95-6, Isoproterenol sulfate
     134-72-5, Ephedrine sulfate
                   616-91-1, N-Acetylcysteine 1397-89-3, Amphotericin B
     Propranolol
                            1406-05-9, Penicillin
     1403-66-3, Gentamycin
                                                     1406-18-4, Vitamin e
     2152-44-5, Betamethasone valerate
                                       2644-64-6, DPPC
     3385-03-3, Flunisolide 4537-77-3, Dipalmitoylphosphatidylglycero
                  5874-97-5, Metaproterenol sulfate 7279-75-6,
     1 5534-09-8
                           9001-27-8, Factor VIII 9004-10-8, Insulin,
     Isoetharine mesylate
    biological studies 9005-49-6, Heparin, biological studies
                                                                   9007-12-9,
                  9041-92-3, \alpha1-Antitrypsin
     Calcitonin
                                            9054-89-1, Superoxide
                 11000-17-2, Vasopressin 11056-06-7, Bleomycin 15687-27-1,
     dismutase
                15826-37-6, Cromolyn sodium 23031-25-6, Terbutaline
     Ibuprofen
     23031-32-5, Terbutaline sulfate 23214-92-8, Doxorubicin 30392-41-7,
                         32986-56-4, Tobramycin
                                                   33419-42-0, Etoposide
     Bitolterol mesylate
                                    51442-15-0
     51022-70-9, Salbutamol sulfate
                                                   62229-50-9, EGF
     62571-86-2, Captopril
                             72332-33-3, Procaterol
                                                      85637-73-6, Atriopeptin
     139639-23-9, Tissue plasminogen activator
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treating respiratory disorders associated with pulmonary elastic fiber
        injury with polysaccharides)
ΙT
     9004-61-9, Hyaluronic acid
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treating respiratory disorders associated with pulmonary elastic fiber
        injury with polysaccharides)
     9004-54-0, Dextran, biological studies
                                             9050-30-0, Heparan sulfate
ΙT
     24967-93-9, Chondroitin sulfate A
                                        24967-94-0, Chondroitin sulfate B
     25322-46-7, Chondroitin sulfate C
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treating respiratory disorders associated with pulmonary elastic fiber
        injury with polysaccharides)
TΤ
     50-02-2, Dexamethasone 53-06-5, Cortisone
     2152-44-5, Betamethasone valerate 3385-03-3, Flunisolide
     5534-09-8
     RL: MOA (Modifier or additive use); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treating respiratory disorders associated with pulmonary elastic fiber
        injury with polysaccharides)
RN
     50-02-2 HCAPLUS
     Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-,
CN
     (11\beta, 16\alpha) - (9CI) (CA INDEX NAME)
```

RN 53-06-5 HCAPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 2152-44-5 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,21-dihydroxy-16-methyl-17-[(1-oxopentyl)oxy]-, (11\beta,16\beta)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3385-03-3 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 6-fluoro-11,21-dihydroxy-16,17-[(1-methylethylidene)bis(oxy)]-, $(6\alpha,11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

RN 5534-09-8 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-chloro-11-hydroxy-16-methyl-17, 21-bis(1-oxopropoxy)-, (11β,16β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 9004-61-9, Hyaluronic acid

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(treating respiratory disorders associated with pulmonary elastic fiber injury with polysaccharides)

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 33 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:745403 HCAPLUS

DN 136:64310

ED Entered STN: 12 Oct 2001

TI Rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in PC12 cells

AU Shi, Li-jun; He, Yong-yong; Liu, Ling-ai; Wang, Chun-an

CS Department of Physiology, Beijing Medical College of PLA, Beijing, 100071, Peop. Rep. China

SO Archives of Biochemistry and Biophysics (2001), 394(2), 145-150 CODEN: ABBIA4; ISSN: 0003-9861

- Cordero-Garcia PCT/US03/26233 PB Academic Press DΤ Journal English LA CC 2-4 (Mammalian Hormones) The effects of corticosterone, a natural glucocorticoid of rat, on the AΒ acetylcholine (ACh)-induced current (IACh) were studied in pheochromocytoma (PC12) cells by using whole-cell clamp technique. IACh proved to be generated through neuronal nicotinic receptor. ACh (30 $\mu M)$ induced an inward current at a holding potential of -80 mV. When cells were preincubated with corticosterone (0.1-100 μM) for 4 min, an inhibitory effect of corticosterone on the peak of IACh was found. effect was reversible, concentration-dependent, and voltage-independent. Intracellular application of corticosterone through the patch electrode did not affect the IACh. Extracellular application of 10 μM corticosterone neither shifted the dose-response curve of the peak IACh to the right (dissociation constant (Kd) = $16.5 \mu M$) nor affected its coefficient (1.8) but inhibited the curve amplitudes by .apprx.49% in the cells pretreated with corticosterone for 4 min. Bovine serum albuminconjugated corticosterone (0.1-10 µM) had the inhibition similar to corticosterone. The inhibitor of transcription, actinomycin D (10 $\mu M)\,,$ and the protein synthesis inhibitor, cycloheximide (50 $\mu M)\,,$ had no effect on the inhibition induced by corticosterone on IACh. These results suggest that corticosterone has rapid inhibitory effect on IACh in PC12 cells, which is mediated by a nongenomic mechanism. It indicates that corticosterone binds to the specific site on the outer cell membrane, probably on the neuronal nicotinic receptor-coupled channel, and inhibits the IACh in a noncompetitive manner, thus controlling the immediate catecholamine release from the sympathetic cells. (c) 2001 Academic Press. ST corticosterone nicotinic acetylcholine receptor neuron ΙT (differentiation; rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells) ΙT Neurotransmission (rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells) ΙT Catecholamines, biological studies Nicotinic receptors RL: BSU (Biological study, unclassified); BIOL (Biological study) (rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells) ΙΤ Nerve (sympathetic; rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells) ΙŢ 50-22-6, Corticosterone 51-84-3, Acetylcholine, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study)
 - (rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells)
- 9061-61-4, Nerve growth factor ΙT 54-11-5, Nicotine RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells)

THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 33

- (1) Bertrand, D; Proc Natl Acad Sci USA 1990, V87, P1993 HCAPLUS
- (2) Bouzat, C; J Biol Chem 1996, V271, P25835 HCAPLUS
- (3) Boyd, N; J Physiol London 1987, V389, P45 HCAPLUS

ł

- (4) Bravo, R; Cell 1987, V48(2), P251 HCAPLUS
- (5) Changeux, J; J Physiol London 1986, V378, P497 HCAPLUS
 (6) Clapham, D; J Physiol London 1984, V347, P255 HCAPLUS
 (7) Cooper, H; Nature 1977, V269, P527 HCAPLUS

- (8) Ditchler, M; Nature 1977, V268(11), P501
- (9) Evans, R; Science 1988, V240, P889 HCAPLUS
- (10) Gillo, B; Br J Pharmacol 1984, V82, P783 HCAPLUS
- (11) Ginell, S; Biopolymers 1974, V27, P843
- (12) Greene, L; Proc Natl Acad Sci USA 1976, V73, P2424 HCAPLUS
- (13) Hamill, O; Pflugers Arch 1981, V391, P85 MEDLINE
- (14) Hollstein, U; Chem Rev 1974, V74, P625 HCAPLUS
- (15) Huganir, R; Nature London 1986, V321, P774 HCAPLUS
- (16) Inoue, M; J Physiol London 1988, V407, P177 HCAPLUS (17) Inoue, M; Neurosci Res 1988, V5, P380 HCAPLUS
- (18) Katzenellenbogen, B; Annu Rev Physiol 1980, V42, P17 HCAPLUS
- (19) Kelly, M; Exp Brain Res 1977, V30, P53 HCAPLUS (20) Lambert, J; Trends Pharmacol Sci 1995, V16, P295 HCAPLUS
- (21) Lee, T; Biochem Biophys Res Commun 1977, V7, P998
- (22) Majewska, M; Brain Res 1987, V404, P355 HCAPLUS
- (23) Mandelbord, I; Brain Res 1974, V80, P303
- (24) Nawata, H; Life Sci 1985, V36, P1957 HCAPLUS (25) Ogden, D; Nature London 1981, V289, P596 HCAPLUS
- (26) Paradiso, K; Mol Pharmacol 2000, V58, P341 HCAPLUS (27) Park-Chung, M; Mol Pharmol 1997, V52, P1113 HCAPLUS
- (28) Ringold, G; Annu Rev Pharmacol Toxicol 1985, V25, P529 MEDLINE
- (29) Shi, L; Acta Pharmacol Sin 2000, V21(3), P281 HCAPLUS
- (30) Steinbach, A; J Gen Physiol 1986, V52, P144
- (31) Tung, M; Biochemistry 1986, V25, P830
- (32) Uki, M; J Neurochem 1999, V72, P808 HCAPLUS
- (33) Valera, S; Proc Natl Acad Sci USA 1992, V89, P9949 MEDLINE
- IT
- 50-22-6, Corticosterone
 RL: BSU (Biological study, unclassified); BIOL (Biological study) (rapid nongenomic effect of corticosterone on neuronal nicotinic acetylcholine receptor in NGF differentiated PC12 cells)
- RN 50-22-6 HCAPLUS
- Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11β) (9CI) (CA INDEX CN NAME)

- L46 ANSWER 34 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- 2001:545502 HCAPLUS ΑN
- DN 135:117219
- Entered STN: 27 Jul 2001 ED
- Hapten-coagulation agent-antineoplastic agent combinations for treating TΙ

```
neoplasms
IN
       Yu, Baofa
PA
       USA
SO
       PCT Int. Appl., 83 pp.
       CODEN: PIXXD2
DT
       Patent
LA
       English
       ICM A61K033-40
ICS A61K031-06; A61K031-045; A61P035-00
TC
       1-6 (Pharmacology)
       Section cross-reference(s): 15
FAN.CNT 1
       PATENT NO.
                                  KIND
                                             DATE
                                                       APPLICATION NO. DATE
       -----
                                             -----
                                                             ______
       WO 2001052868 A1 20010726
WO 2001052868 C2 20030116
                                                          WO 2001-US1737 20010118
PΙ
            W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2002044919 A1
US 6811788 B2
CA 2397598 AA
JP 2004505009 T2
PRAI US 2000-177024P P
WO 2001-US1737 W
                                                          US 2001-765060
                                             20020418
                                                                                            20010117
                                             20041102
                                                           CA 2001-2397598 20010118
JP 2001-552915 20010118
                                             20010726
                                             20040219
                                             20000119
                                             20010118
CLASS
 PATENT NO.
                       CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
                       ____
                                 ______
 WO 2001052868
                     ICM
                                 A61K033-40
                                 A61K031-06; A61K031-045; A61P035-00
                        ICS
                       ECLA
 US 2002044919
                                 A61K031/4164+M; A61K033/40+M; A61K045/06
                     FTERM 4B024/AA01; 4B024/BA80; 4B024/CA01; 4B024/CA02; 4B024/CA11; 4B024/CA20; 4B024/DA03; 4B024/EA02; 4B024/HA17; 4C084/AA24; 4C084/AA27; 4C084/MA02; 4C084/MA17; 4C084/MA66; 4C084/MA05; 4C084/MA14;
 JP 2004505009
                                  4C084/ZB261; 4C086/AA01; 4C086/AA02; 4C086/BA08;
                                  4C086/MA03; 4C086/MA17; 4C086/MA66; 4C086/NA05; 4C086/NA14; 4C086/ZB26; 4C206/AA01; 4C206/AA02;
                                  4C206/CA03; 4C206/MA03; 4C206/MA06; 4C206/MA37;
                                  4C206/NA05; 4C206/NA14; 4C206/ZB26
       Methods are provided for treating neoplasms, tumors and cancers, using one
AΒ
       or more haptens and coagulation agents or treatments, alone or in
       combination with other anti-neoplastic agents or treatments. Also
       provided are combinations, and kits containing the combinations for effecting
       the therapy.
       hapten coagulation agent antineoplastic agent combination antitumor
ST
TT
       Gene, animal
       RL: BAC (Biological activity or effector, except adverse); BSU (Biological
       study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
       (Uses)
            (APC; hapten-coagulation agent-antineoplastic agent combinations for
           treating neoplasms)
       Gene, animal
IT
```

- RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (B-lym; hapten-coagulation agent-antineoplastic agent combinations for
 treating neoplasms)
- IT Gene, animal

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(DCC; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

- IT Gene, animal
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (Ki-ras; hapten-coagulation agent-antineoplastic agent combinations for
 treating neoplasms)
- IT Cytokines

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(MBP (major basic protein); hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

- IT Gene, animal
 - RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (N-myc; hapten-coagulation agent-antineoplastic agent combinations for
 treating neoplasms)
- IT Gene, animal
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (N-ras; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Gene, animal
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (NF-1; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Gene, animal
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (RB1; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Gene, animal
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
 - (TP53; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Gene, animal
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (WT-1; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Adrenal cortex
 - (adrenocortical suppressants; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Interleukin 1
 RL: BAC (Biological activity or effector, except adv
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (and anti-IL1 antibody; hapten-coagulation agent-antineoplastic agent

combinations for treating neoplasms) ΙT Cytokines RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (and cytokine gene; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Chemokines RL: BSU (Biological study, unclassified); BIOL (Biological study) (angiostatic chemokine gene; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IΤ Steroids, biological studies RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (angiostatic; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ITNutrients (anti-; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Antisense oligonucleotides IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (anti-oncogene; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Intestine, neoplasm IT(anus, inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ITAntitumor agents (anus; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Nerve (auditory, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Biliary tract (bile duct, neoplasm, inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (bladder carcinoma; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ITAntitumor agents (bone; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) TΤ Antitumor agents (brain; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (c-Ha-ras; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IΤ Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (c-abl; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study)

(c-erbA; hapten-coagulation agent-antineoplastic agent combinations for

```
treating neoplasms)
ΙT
     Gene, animal
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (c-erbB; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Gene, animal
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (c-myc; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Gene, animal
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (c-sis; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Ear
     Heart
     Oviduct
     Pituitary gland
     Tonsil
        (cancer inhibitors; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Bladder
     Esophagus
     Kidney, neoplasm
     Lung, neoplasm
     Mammary gland
     Ovary, neoplasm
        (carcinoma, inhibitors; hapten-coaqulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
        (cell-mediated; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Antitumor agents
        (central nervous system;
        hapten-coaqulation agent-antineoplastic agent combinations for treating
        neoplasms)
ΙT
    Nervous system
        (central, neoplasm, inhibitors; hapten-coagulation
        agent-antineoplastic agent combinations for treating neoplasms)
ΙT
     Uterus, neoplasm
        (cervix, inhibitors; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Antitumor agents
        (cervix; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Intestine, neoplasm
        (colon, inhibitors; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Antitumor agents
        (colon; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     Human immunodeficiency virus
        (conditionally replicating, vector; hapten-coagulation
        agent-antineoplastic agent combinations for treating neoplasms)
IT
     Therapy
        (cryothrapy and transpupillary thermotherapy; hapten-coagulation
        agent-antineoplastic agent combinations for treating neoplasms)
ΙT
     Cytolysis
        (cytolytic gene; hapten-coagulation agent-antineoplastic agent
```

combinations for treating neoplasms)

ΙT Basement membrane (degradation, inhibitors; hapten-coaqulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (digestive tract; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Uterus, neoplasm (endometrium, inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (endometrium; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Cytotoxic agents (endothelial cell; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Blood vessel (endothelium, endothelial cell proliferation inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (erbB2; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Antitumor agents IT (esophagus carcinoma; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Antitumor agents (esophagus; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (ets; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Brucella melitensis IT(extract; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (eye; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (fes; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (fgr; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (fms; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (fos; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

(fps; hapten-coagulation agent-antineoplastic agent combinations for

RL: BSU (Biological study, unclassified); BIOL (Biological study)

TΤ

Gene, animal

treating neoplasms)

```
ΙT
     Alkylating agents, biological
     Angiogenesis inhibitors
     Antitumor agents
     Chelating agents
     Corynebacterium parvum
     Coupling agents
     Drug delivery systems
     Immunostimulants
     Immunotherapy
     Mycobacterium BCG
     Newcastle disease virus
     Oxidizing agents
     Radiosensitizers, biological
     Radiotherapy
     Reducing agents
     Retroviral vectors
     Surgery
     Virus vectors
        (hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     RL: BAC (Biological activity or effector, except adverse); BPR (Biological
     process); BSU (Biological study, unclassified); THU (Therapeutic use);
     BIOL (Biological study); PROC (Process); USES (Uses)
        (hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
     Alcohols, biological studies
TΤ
     Antibodies
     Enzymes, biological studies
     Hormones, animal, biological studies
     Interleukin 12
     Interleukin 2
     Interleukin 4
     Laminins
     Natural products
     Ovalbumin
     Polysaccharides, biological studies
     Protamines
     Reporter gene
     Retinoids
     Thrombospondins
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Antitumor agents
        (head; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Liver, neoplasm
        (hepatoma, inhibitors; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
IT
     Antitumor agents
        (hepatoma; hapten-coagulation agent-antineoplastic agent combinations
        for treating neoplasms)
IT
     Herb
        (herbal extract; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
IT
     Human herpesvirus
```

Cordero-Garcia PCT/US03/26233

(herpes simplex viral amplicon vector; hapten-coaqulation agent-antineoplastic agent combinations for treating neoplasms) IT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (hit; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (hst; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Immunity (humoral; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Adrenal gland, neoplasm Bone, neoplasm Brain, neoplasm Cell migration Eye, neoplasm Kidney, neoplasm Lung, neoplasm Ovary, neoplasm Pancreas, neoplasm Skin, neoplasm Stomach, neoplasm Testis, neoplasm Thyroid gland, neoplasm Uterus, neoplasm (inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) TΤ Drug delivery systems (injections; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (int-1; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (int2; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Proteins, specific or class IT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (interferon γ -inducible protein 10; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Gene, animal ΙT RL: BSU (Biological study, unclassified); BIOL (Biological study) (jun; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) TΤ Antitumor agents (kidney carcinoma; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Antitumor agents (kidney; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Antitumor agents ΙT (larynx tumor inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

- Cordero-Garcia PCT/US03/26233 Lasers IT(laser coagulation; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT (lid, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ITAntitumor agents (lung carcinoma; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ITAntitumor agents (lung non-small-cell carcinoma; hapten-coaquiation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (lung; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Antitumor agents (mammary gland carcinoma; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (mammary gland; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Jaw (mandibula, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT (mandibula, condylar process, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT
- Gene, animal
- RL: BSU (Biological study, unclassified); BIOL (Biological study) (mas; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Jaw (maxilla, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT
 - RL: BSU (Biological study, unclassified); BIOL (Biological study) (met; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- ITGene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (mil; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (mos; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- ITAntitumor agents (mouth; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- TΤ Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (myb; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)
- IT Pharynx (nasopharynx, neoplasm, inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Antitumor agents ΙT
- (nasopharynx; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

```
ΙT
     Antitumor agents
        (neck; hapten-coaquiation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     Digestive tract
     Esophagus
     Head
     Mammary gland
     Mouth
     Neck, anatomical
     Nose
     Prostate gland
     Salivary gland
     Spinal cord
     Urethra
        (neoplasm, inhibitors; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
     Gene, animal
ΙT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (neu; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Vibrio cholerae
        (neuraminidase; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Lung, neoplasm
        (non-small-cell carcinoma, inhibitors; hapten-coagulation
        agent-antineoplastic agent combinations for treating neoplasms)
ΙT
        (nonvirulant; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Gene, animal
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (oncogene, inhibitor; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
IT
    Antitumor agents
        (ovary carcinoma; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
IT
     Antitumor agents
        (ovary; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     Gene, animal
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (p16; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     Gene, animal
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (p21; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     Gene, animal
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (p27; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
```

(pancreas; hapten-coagulation agent-antineoplastic agent combinations

IT

Antitumor agents

for treating neoplasms) ΙT Salivary gland (parotid, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Antitumor agents (penis tumor inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Fibronectins RL: BSU (Biological study, unclassified); BIOL (Biological study) (peptides; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Microwave (percutaneous microwave coagulation therapy; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Proteins, specific or class ΙT RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (placental proliferin-related protein; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Proliferation inhibition (proliferation inhibitors, endothelial cell; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Proteins, specific or class RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (proliferin-related protein; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Antitumor agents (prostate gland; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) TΤ Denaturants (protein denaturing agents; hapten-coaqulation agent-antineoplastic agent combinations for treating neoplasms) IT Denaturation (protein, agents for; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT (radio-frequency-induced coagulation necrosis; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (raf; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (ral; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Intestine, neoplasm IT(rectum, inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Antitumor agents (rectum; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (rel; hapten-coagulation agent-antineoplastic agent combinations for

treating neoplasms)

- IT Eye (retina, cancer inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Gene, animal TΨ RL: BSU (Biological study, unclassified); BIOL (Biological study) (ros; hapten-coaquiation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (ski; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IΤ Antitumor agents (skin; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (small intestine; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT Intestine, neoplasm (small, inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (solid tumor; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (spinal cord; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) IT RL: BSU (Biological study, unclassified); BIOL (Biological study) (src; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (stomach; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Gene, animal RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (suicide gene; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ΙT Antitumor agents (testis; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ITAntitumor agents (thyroid; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) ŢΤ Gene, animal RL: BSU (Biological study, unclassified); BIOL (Biological study) (trk; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) TΤ Larynx Penis (tumor inhibitors; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms) Proteins, specific or class TΤ RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (tumor suppressor protein; hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

```
IT
     Gene, animal
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (tumor suppressor; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Vagina
        (tumor, inhibitors; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
IT
     Antigens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (tumor-associated; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
IT
     Fibroblast growth factor receptors
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (type 1, soluble; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
TΤ
     Sound and Ultrasound
        (ultrasonic therapy; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Antitumor agents
        (urethra; hapten-coagulation agent-antineoplastic agent combinations
        for treating neoplasms)
ΙT
     Antitumor agents
        (uterus; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Immunization
        (vaccination; hapten-coagulation agent-antineoplastic agent
        combinations for treating neoplasms)
ΙT
     Antitumor agents
        (vaginal tumor inhibitors; hapten-coagulation agent-antineoplastic
        agent combinations for treating neoplasms)
ΙT
     Adenoviridae
     Simian virus 40
     Vaccinia virus
        (vector; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
        (vestibulocochlear, cancer inhibitors; hapten-coagulation
        agent-antineoplastic agent combinations for treating neoplasms)
ΙT
     Fluids
        (vitreous; hapten-coagulation agent-antineoplastic agent combinations
        for treating neoplasms)
ΙT
     Reproductive tract
        (vulva, neoplasm, inhibitors; hapten-coagulation agent-antineoplastic
        agent combinations for treating neoplasms)
ΙT
     Antitumor agents
        (vulva; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
IT
     Gene, animal
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (yes; hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
ΙT
     Tumor necrosis factors
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
```

(a, antibody to; hapten-coagulation agent-antineoplastic agent

```
combinations for treating neoplasms)
·IT
      Interferons
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
         (α; hapten-coagulation agent-antineoplastic agent combinations
         for treating neoplasms)
 IT
      Integrins
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (ανβ3, antibody to; hapten-coagulation agent-antineoplastic
         agent combinations for treating neoplasms)
 IΤ
      Interferons
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
         (γ; hapten-coagulation agent-antineoplastic agent combinations
         for treating neoplasms)
TΤ
      9001-67-6, Neuraminidase
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
         (Vibrio cholera; hapten-coagulation agent-antineoplastic agent
         combinations for treating neoplasms)
ΙT
      127464-60-2, Vascular endothelial growth factor
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (antibody to, and VEGF inhibitors; hapten-coagulation
         agent-antineoplastic agent combinations for treating neoplasms)
ΙT
      106096-93-9, Basic fibroblast growth factor
      RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (antibody to; hapten-coagulation agent-antineoplastic agent
         combinations for treating neoplasms)
IT
      50-01-1, Guanidine hydrochloride 50-02-2, Dexamethasone
      50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone
      50-24-8, Prednisolone 52-67-5, D-Penicillamine
                                                         53-02-1,
      Tetrahydrocortisol 53-06-5, Cortisone 53-86-1, Indomethacin
                           56-81-5, Glycerol, biological studies
      54-05-7, Chloroquine
                                57-13-6D, Urea, derivs., biological studies
      Urea, biological studies
     57-55-6, 1,2-Propanediol, biological studies 58-27-5, Menadione 59-05-2, Methotrexate 60-24-2, 2-Mercaptoethanol 60-34-40
                                 64-17-5, Ethyl alcohol, biological studies
     Methylhydrazine, derivs.
      67-56-1, Methyl alcohol, biological studies
                                                    67-63-0, Isopropyl alcohol,
     biological studies 67-66-3, Chloroform, biological studies
                                                                      70 - 34 - 8,
                             71-23-8, n-Propyl alcohol, biological studies
      Dinitrofluorobenzene
      71-36-3, n-Butyl alcohol, biological studies
                                                    71-41-0, n-Pentyl alcohol,
     biological studies 75-65-0, tert-Butyl alcohol, biological studies
      75-85-4, tert-Pentyl alcohol 75-91-2, tert-Butyl hydroperoxide
      78-83-1, Isobutyl alcohol, biological studies
                                                      78-92-2, sec-Butyl alcohol
     88-89-1, Trinitrophenol
                              96-41-3, Cyclopentanol 104-54-1, Cinnamyl
               107-18-6, Allyl alcohol, biological studies
                                                              107-21-1,
      alcohol
      1,2-Ethanediol, biological studies 108-93-0, Cyclohexanol, biological
                                                       111-27-3, n-Hexyl
               108-95-2, Phenol, biological studies
      studies
      alcohol, biological studies
                                    111-70-6, n-Heptyl alcohol
                                                                 111-87-5.
                                           112-30-1, n-Decyl alcohol
      n-Octyl alcohol, biological studies
      112-53-8, n-Dodecyl alcohol
                                    112-72-1, n-Tetradecyl alcohol
                                                                      112-92-5,
      n-Octadecyl alcohol
                            115-77-5, Pentaerythritol, biological studies
      123-51-3, Isopentyl alcohol
                                   128-08-5, N-Bromosuccinimide
                        137-32-6, Active-amyl alcohol
      N-Ethylmaleimide
                                                         145-63-1, Suramin
                       151-51-9, Carbodiimide 152-58-9, Cortexolone
      147-94-4, AraC
      342-69-8, 6-Methylmercaptopurine riboside 446-86-6, Azathioprine
```

```
504-63-2, 1,3-Propanediol 517-28-2, Hematoxylin
                                                             520-85-4,
     Medroxyprogesterone 593-84-0, Guanidinium thiocyanate
                                                                  994-36-5, Sodium
                1398-61-4, Chitin 4846-27-9 6117-91-5, Crotyl alcohol
     citrate
     7440-06-4D, Platinum, coordination complexes, biological studies
                                   7722-84-1, Hydrogen peroxide, biological
     7585-39-9, β-Cyclodextrin
               7790-28-5, Sodium periodate 8049-47-6, Pancreat: 9002-62-4D, Prolactin, 16-kDa fragment, biological
                                               8049-47-6, Pancreatin 9001-73-4,
     studies
     Papain
     studies 9004-61-9, Hyaluronan
                                       9005-49-6, Heparin,
                           9012-72-0, Glucan
                                                 9025-39-2, Heparinase
     biological studies
     10028-15-6, Ozone, biological studies
                                                10102-43-9, Nitric oxide,
     biological studies 10118-90-8, Minocycline 10361-76-9, Potas peroxymonosulfate 10465-78-8, Diamide 11103-57-4, vitamin A
                                                      10361-76-9, Potassium
                                  14769-73-4, Levamisole
     11118-27-7, Gold chloride
                                                              15307-86-5,
                   15663-27-1, Cisplatin
                                             15687-27-1, Ibuprofen
                                                                     15866-90-7,
     Diclofenac
                 22668-01-5, SR 2508
                                        23214-92-8D, Doxorubicin,
     Metastat
                                            25550-58-7, Dinitrophenol
     conjugates with adipic dihydrazide
     27314-97-2, Tirapazamine 33507-63-0, Substance P
                                 27591-97-5, Tilorone
                                                           33069-62-4, Paclitaxel
                                 34031-32-8, Auranofin
                                                           36653-82-4,
     1-Hexadecanol
                      36877-68-6D, Nitroimidazole, derivs.
                                                               36930-63-9
     37270-94-3, platelet factor 4 39450-01-6 51110-01-1, Somatostatin
     51592-06-4, Iodogen 59865-13-3, Cyclosporin A 73590-58-6, Or
75706-12-6, SU101 83150-76-9, Octreotide 83869-56-1, GM-CSF
84088-42-6, Linomide 86090-08-6, Angiostatin 105844-41-5, P.
                                                           73590-58-6, Omeprazole
                                                        105844-41-5, Plasminogen
                            108121-76-2D, Anthracenedione, derivs.
     activator inhibitor
                                                                        124861-55-8
     126857-36-1, O8, biological studies 129298-91-5, AGM-1470
                                                                        130370-60-4,
              134633-29-7, Tecogalan sodium 140207-93-8 140208-24-8, tissue
                                          145809-21-8, tissue inhibitor of
     inhibitor of metalloproteinase-1
                                           153851-75-3, Heptoxepane
     metalloproteinase-3
                            148805-91-8
                            166981-13-1, CT-2584
     154039-60-8, BB-2516
                                                      184110-80-3, GM 1474
                            203515-84-8 324740-00-3, Vitaxin
     188417-67-6, CM 101
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
         (hapten-coagulation agent-antineoplastic agent combinations for
        treating neoplasms)
                                                                      79955-99-0,
                              9055-65-6, prostaglandin synthase
     9040-48-6, Gelatinase
                      141907-41-7, Matrix metalloproteinase
     Stromelysin 1
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitor; hapten-coagulation agent-antineoplastic agent combinations
        for treating neoplasms)
     9001-99-4, RNase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (placental RNase inhibitor; hapten-coagulation agent-antineoplastic
        agent combinations for treating neoplasms)
RE.CNT
               THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Battentier, E; FR 2505182 A 1982 HCAPLUS
(2) Berd, D; US 5290551 A 1994 HCAPLUS
(3) Cone, C; US 4724230 A 1988 HCAPLUS
(4) du Pont; EP 0378888 A 1990 HCAPLUS
(5) Roy, W; WO 0006143 A 2000 HCAPLUS
(6) Rubin, D; US 5005588 A 1991
(7) Rupchock, P; US 4447526 A 1984 HCAPLUS
(8) Zhang, M; Melanoma Research 1998, V8(6), P510 HCAPLUS
     50-02-2, Dexamethasone 50-23-7, Hydrocortisone
     50-24-8, Prednisolone 53-06-5, Cortisone
     9004-61-9, Hyaluronan
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
```

ΙT

IT

RE

(Uses)

(hapten-coagulation agent-antineoplastic agent combinations for treating neoplasms)

RN 50-02-2 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-24-8 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

```
RN
     53-06-5 HCAPLUS
     Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)
CN
Absolute stereochemistry.
                              OH
                           OH
                     S
                  S
           R
             Н
                    Н
RN
     9004-61-9 HCAPLUS
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L46
     ANSWER 35 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
     2001:359780 HCAPLUS
DN
     134:371773
ED
     Entered STN: 18 May 2001
ΤI
     Therapy for human cancers using cisplatin and other drugs or genes
     encapsulated into liposomes
IN
     Boulikas, Teni
PΑ
     USA
SO
     PCT Int. Appl., 44 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
IC
     ICM A61K031-00
          C07H021-02; C07H021-04; C12N015-63; C12N015-85; C12N015-87;
           C12N015-88
CC
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 1
FAN.CNT 1
     PATENT NO.
                           KIND
                                   DATE
                                                APPLICATION NO.
     _____
                           ____
                                   _____
                                                _____
PΙ
     WO 2001034130
                           A1
                                   20010517
                                             WO 2000-US29723
                                                                         20001027
              AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
              DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
              TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
              MD, RU, TJ, TM
          RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
              DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
              CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
```

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

US 1999-434345

EP 2000-972379

CA 2000-2358948

20030128

20010517

20011128

US 6511676

CA 2358948

EP 1156789

В1

AΑ

Α1

IE, SI, LT, LV, FI, RO

19991105

20001027

20001027

ΙT

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (TP53; therapy for human cancers using cisplatin and other drugs or genes encapsulated into liposomes)

IT Gene, animal RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

```
(bcl-1; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
ΙT
     Antitumor agents
        (carcinoma; therapy for human cancers using cisplatin and other drugs
        or genes encapsulated into liposomes)
ΙT
     Peptides, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (conjugates, with lipids, fusogenic; therapy for human
        cancers using cisplatin and other drugs or genes encapsulated into
        liposomes)
     Lipids, biological studies
TT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (conjugates, with peptides, fusogenic; therapy for human
        cancers using cisplatin and other drugs or genes encapsulated into
        liposomes)
ΙT
     Phosphoproteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (gene ElA; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
ΙT
     Drug delivery systems
        (liposomes; therapy for human cancers using cisplatin and other drugs
        or genes encapsulated into liposomes)
     Proteins, specific or class
TΤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (p21; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
ΙT
     Ras proteins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (p21c-ras; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
IT
     Gene, animal
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pax5; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
     Phosphatidylcholines, biological studies
TΤ
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (soya, hydrogenated; therapy for human cancers using cisplatin and
        other drugs or genes encapsulated into liposomes)
    Micelles
TΥ
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
TΤ
    Gene
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
ΙT
     Interleukin 12
     Interleukin 2
     Interleukin 4
     Interleukin 7
     Oligonucleotides
     Peptide nucleic acids
     Polyoxyalkylenes, biological studies
     Ribozymes
```

```
Transforming growth factors
     Tumor necrosis factors
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
ΙT
     Gene, animal
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (tk; therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
ΙT
     Exciplex
        (triplet; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
IT
     Interferons
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (γ; therapy for human cancers using cisplatin and other drugs or
        genes encapsulated into liposomes)
                                   57-22-7, Vincristine
IT
     50-91-9 53-03-2, Prednisone
                                                           865-21-4,
     Vinblastin
                  11056-06-7, Bleomycin 15663-27-1, Cisplatin
                                                                   23214-92-8,
     Doxorubicin
                   25316-40-9, Adriamycin
                                            33069-62-4, Taxol
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
     64-17-5, Ethanol, uses RL: NUU (Other use, unclassified); USES (Uses)
ΙT
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
IT
     57-88-5, Cholesterol, biological studies
                                                2022-85-7, 5 Fluorocytosine
     2462-63-7
                 4537-76-2, Distearoylphosphatidyl ethanolamine 4537-77-3,
                                        4537-78-4, Distearoylphosphatidyl
     Dipalmitoylphosphatidyl glycerol
     glycerol
                4539-70-2, Distearoylphosphatidyl choline 9004-61-9,
     Hyaluronic acid
                       9025-05-2, Cytosine deaminase
                                                        25322-68-3,
     Polyethylene glycol
                           61361-72-6, Dimyristoylphosphatidyl glycerol
     67763-96-6, Igfi
                       83869-56-1, Gm csf
                                             127464-60-2, Vascular endothelial
                                   214334-87-9
     growth factor
                     175991-10-3
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
                                 191936-91-1 247040-78-4
ΙT
     161007-71-2
                   177714-50-0
                                                              340681-01-8
     RL: PRP (Properties)
        (unclaimed sequence; therapy for human cancers using cisplatin and
        other drugs or genes encapsulated into liposomes)
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 6
(1) Abra; US 5945122 A 1999 HCAPLUS
(2) Lee; US 5908777 A 1999 HCAPLUS
(3) Mayer; US 5795589 A 1998 HCAPLUS
(4) Needham; US 5882679 A 1999 HCAPLUS
(5) Roth; US 5747469 A 1998 HCAPLUS
(6) Szoka; US 5567434 A 1996 HCAPLUS
     53-03-2, Prednisone
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
     53-03-2 HCAPLUS
RN
```

Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX

CN

OH

OH

NAME)

Absolute stereochemistry.

PRAI US 1999-165398P

CLASS

US 2000-196571P

```
S
                 S
          R
            Н
                   Η
ΙT
     9004-61-9, Hyaluronic acid
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (therapy for human cancers using cisplatin and other drugs or genes
        encapsulated into liposomes)
     9004-61-9 HCAPLUS
RN
     Hyaluronic acid (8CI, 9CI)
                                (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     ANSWER 36 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
L46
     2001:338762 HCAPLUS
AN
DN
     134:362292
     Entered STN: 11 May 2001
ED
     Methods of determining individual hypersensitivity to a pharmaceutical
TI
     agent from gene expression profile
     Farr, Spencer
ΙN
     Phase-1 Molecular Toxicology, USA
PΑ
     PCT Int. Appl., 222 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     English
     ICM C12Q001-68
IC
     ICS G01N033-50
     3-4 (Biochemical Genetics)
CC
     Section cross-reference(s): 1, 6, 7, 13, 15
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
                         ____
     WO 2001032928
                          A2
                                20010510
                                            WO 2000-US30474
                                                                    20001103
PΤ
                                20020725
     WO 2001032928
                         Α3
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
```

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

19991105

20000411

Р

Ρ

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2001032928 ICM C12Q001-68
ICS G01N033-50

- The invention discloses methods, gene databases, gene arrays, protein arrays, and devices that may be used to determine the hypersensitivity of individuals to a given agent, such as drug or other chemical, in order to prevent toxic side effects. In one embodiment, methods of identifying hypersensitivity in a subject by obtaining a gene expression profile of multiple genes associated with hypersensitivity of the subject suspected to be hypersensitive, and identifying in the gene expression profile of the subject a pattern of gene expression of the genes associated with hypersensitivity are disclosed. The gene expression profile of the subject may be compared with the gene expression profile of a normal individual and a hypersensitive individual. The gene expression profile of the subject that is obtained may comprise a profile of levels of mRNA or cDNA. The gene expression profile may be obtained by using an array of nucleic acid probes for the plurality of genes associated with hypersensitivity. The expression of the genes predetd. to be associated with hypersensitivity is directly related to prevention or repair of toxic damage at the tissue, organ or system level. Gene databases arrays and apparatus useful for identifying hypersensitivity in a subject are also
- ST drug hypersensitivity gene expression DNA microarray app
- IT Uncoupling protein
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (1, 2 and 3; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (11 beta-hydroxysteroid dehydrogenase type II; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Gene, animal
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (12-lipoxygenase; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Metallothioneins
 - Presenilins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (1; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Cyclin dependent kinase inhibitors
 - (1A; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Metallothioneins
 - Synaptobrevins
 - Thrombospondins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
 - (2; methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile)
- IT Connexins
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

```
(30; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Connexins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (32; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Syntaxins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (3; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Connexins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (40; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Bone morphogenetic proteins
     Keratins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (4; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (5-aminolevulinate synthase 2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (6-C-kine; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (60S ribosomal protein L6; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Keratins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (6; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
TΤ
     Cyclins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (A, A1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Apolipoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
(A-I; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Apolipoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (A-II; methods of determining individual hypersensitivity to a
pharmaceutical
```

```
agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ACP (acyl-carrier); methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ADP/ATP carrier; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ALDH1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ALDH2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ATF (activating transcription factor), ATF3 and ATF4; methods of
determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
TT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ATF-2 (activating transcription factor 2); methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ATF4; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ATP dep. helicase II (70kDa); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ATP dep. helicase II (Ku80); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TT
    Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ATPase subunit 6; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
```

Cordero-Garcia PCT/US03/26233

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (B-myb; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Platelet-derived growth factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (B; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (BAG-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Multidrug resistance proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (BCRP (breast cancer resistance protein); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Gene, animal
IΤ
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (BRCA1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Sialoglycoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (BSP II (bone sialoglycoprotein II); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Bak; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Bax (alpha); methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Bax; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Bcl-xL; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TT
     Chemokines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C-C, C10; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
```

```
ΙT
     Chemokines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C-C, I-309; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Apolipoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C-III; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C-reactive; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C/EBP (CCAAT box/enhancer element-binding protein), &; methods
        of determining individual hypersensitivity to a pharmaceutical agent from
        gene expression profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C/EBP-\alpha) (CCAAT box/enhancer element-binding protein \alpha);
        methods of determining individual hypersensitivity to a pharmaceutical agent
        from gene expression profile)
     Glycoproteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C4bp (complement C4b-binding protein); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C5a anaphylatoxin receptor; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Complement receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (C5a; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
TΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CAP (adenylate cyclase-associated protein); methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     CD antigens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CD82; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
ΤТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (CHD2 and CIG49; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CIDEB; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CLP; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CTCF; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Chemokine receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CXCR4; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CYP1A1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (CYP4A; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Chkl; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
        (Clara cell; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Clusterin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Csa-19; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cyclins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (D1, A1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cyclins
```

Cordero-Garcia PCT/US03/26233

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (D3; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DCC (deleted in colorectal cancer); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DEAD-box protein p72; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
     Gene, animal
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA binding protein inhibitor ID-2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA dependent helicase; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
     Gene, animal
ΤT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA dependent protein kinase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Enzymes, biological studies
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA helicase II; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Enzymes, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA helicases; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA ligase IV; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA polymerase alpha; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA repair protein XRCC1; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
     Gene, animal
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA topoisomerase I; methods of determining individual hypersensitivity to
а
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA-binding, APRF; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA-binding, p48; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA-binding, zinc finger-containing, ZNF134; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DNA-binding, zinc finger-containing; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DOC-2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (DRA; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Dopamine receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (D2(short); methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Calbindins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (D28k; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
TΤ
     Calbindins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (D9k; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Cadherins
     Selectins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (E-; methods of determining individual hypersensitivity to a pharmaceutical
```

```
agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (E-cadherin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (E2F1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Apolipoproteins
     Cyclins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (E; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ELAV-like neuronal protein-2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ERA-B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ERCC-5; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ERCC1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΨ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ERCC3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ERp72; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
    Gene, animal
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Egr-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (FEN-1; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (FIC1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (FYN proto-oncogene; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Fra-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (G/T mismatch binding protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Cyclins
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (G1, cyclin G1 interacting protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (G6PD; methods of determining individual hypersensitivity to a
pharmaceutical

    agent from gene expression profile)

TΤ
     Cyclins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (G; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GAS-7, GCLR, and GCLS; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
     Gene, animal
TΤ
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GOS24; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GRP (glucose-regulated protein), glucose-regulated protein 170;
        methods of determining individual hypersensitivity to a pharmaceutical agent
        from gene expression profile)
IT
     Proteins
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GRP58 (glucose-regulated protein, 58 kDa); methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GRP78 (glucose-regulated protein, 78,000-mol-weight); methods of
determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GRP94; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (GT mismatch binding protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Gene, animal
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Gadd153; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Gadd45; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Garg-16; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Ferritins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (H chain; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Glycoproteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (H-CAM (homing cell adhesion mol.); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Cadherins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (H-cadherins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Histones
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (H2A; methods of determining individual hypersensitivity to a pharmaceutical
```

```
agent from gene expression profile)
IT
     Histones
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (H2B; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HDLC1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HIF-1 (hypoxia-inducible factor 1), \alpha; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HMG CoA reductase; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     High-mobility group proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HMG1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HNF-4 (hepatocyte nuclear factor 4); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HNF4; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Heat-shock proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HSP 27; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Heat-shock proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HSP 47; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Heat-shock proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HSP 70; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Heat-shock proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HSP 90; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
IT.
     Heat-shock proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HSP12; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (HSP70; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Hsp90; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (I, II and III subunits for cytochrome oxidase; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Synaptotagmin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (I; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Cell adhesion molecules
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ICAM-1 (intercellular adhesion mol. 1); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Cell adhesion molecules
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ICAM-2 (intercellular adhesion mol. 2); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Cell adhesion molecules
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ICAM-3 (intercellular adhesion mol. 3); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ICE RelII; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ID-1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
    Metallothioneins
IΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (IG; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Insulin-like growth factor-binding proteins
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
(IGF-BP-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Insulin-like growth factor-binding proteins
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
(IGF-BP-2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Insulin-like growth factor-binding proteins
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
(IGF-BP-3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Insulin-like growth factor-binding proteins
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (IGF-BP-5; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Synaptophysin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (II; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (IL1B; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (IRF-7; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ISG-15; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ISGF-3 (interferon-stimulated gene factor 3); methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Id2 (inhibitor of differentiation 2); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Immunoglobulin receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

ij÷

```
(IgG type I; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (IkB-a; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (II-13; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (II-8; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Phosphoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (I\kappa B-\alpha) (inhibitor of RNA formation factor NF-\kappa B,
        \alpha); methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (JNK1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
TT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Jagged 1 and Jagged 2; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
     Proteins, specific or class
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (JunD; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IΤ
     Cadherins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (K-; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Keratins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (K17; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Ki67; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
TΤ
     Liver
```

```
(Kupffer cell; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (L-FABP (liver fatty acid-binding protein); methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (L09604; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (L13; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (L13A and L37a; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (L34; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (L6; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Lipoprotein receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (LDL, low d. Lipoprotein; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Liposin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MAD related protein 2; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MAP kinase; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cytokines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MBP (major basic protein); methods of determining individual
```

Cordero-Garcia PCT/US03/26233

```
hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MCL-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     Multidrug resistance proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MDR1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Multidrug resistance proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MDR2; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     P-glycoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MDR3; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Transcription factors
TT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MEF-2 (myocyte-specific enhancer element-binding factor 2); methods of
        determining individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Histocompatibility antigens
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MHC (major histocompatibility complex), MHC class II transactivator;
        methods of determining individual hypersensitivity to a pharmaceutical agent
        from gene expression profile)
     Histocompatibility antigens
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MHC (major histocompatibility complex), class I; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Histocompatibility antigens
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MHC (major histocompatibility complex), class II; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Gene, animal
     Proteins, specific or class
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MLH1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Multidrug resistance proteins
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MRP4; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MSH2; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MSH2M; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MSH3 gene; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MSH3; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Transcription factors
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MTF-1 (metal-regulatory transcription factor 1); methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Mcl-1 (myeloid cell leukemia sequence-1); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Mim; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (MnSOD; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Antigens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Mr 110,000; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Cadherins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (N-; methods of determining individual hypersensitivity to a pharmaceutical
```

```
agent from gene expression profile)
     Cell adhesion molecules
TT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (N-CAM; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NADH oxidoreductase subunit MWFE; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Antigens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NCA (nonspecific crossreactive antigen); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NF-A2 (nuclear factor A2); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NF-E2 (nuclear factor erythroid 2), NF-E2; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NF-III (nuclear factor III); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Transcription factors
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NF-IV (nuclear factor IV); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NF-\kappa B) (nuclear factor \kappa B); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NMB; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Antigens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (NY-LU-12; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
```

```
Steroid receptors
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Ner-1S; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Notch (receptor)
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Notch1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Nucleosome assembly protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Cadherins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (OB-cadherin 1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (OTK27; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (OX40 ligand; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cadherins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (P-; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
    Glycoproteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (P170; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
ΤТ
     Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (P311; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PABP (poly(A)-binding protein); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
    Gene, animal
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PAPS synthetase; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PARP; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PBX2; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PCDH7; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PCNA; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PDGF associated protein; methods of determining individual
hypersensitivity to
        a pharmaceutical agent from gene expression profile)
     Cell adhesion molecules
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PECAM-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PEG3; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PIC1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PMS2; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PTEN/MMAC1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
```

```
Nerve
ΙT
        (Purkinje cell; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAD 51; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAD23; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAD50; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Gene, animal
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAD51 homolog; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Gene, animal
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAD52; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Gene, animal
    Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAD; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
    Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAG-1 (recombination-activating gene, 1); methods of determining individual
       hypersensitivity to a pharmaceutical agent from gene expression
       profile)
IT
    Gene, animal
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RANTES; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Proteins, specific or class
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAP1A; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Retinoic acid receptors
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAR-\beta; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Retinoic acid receptors
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RAR-γ; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
ΙT
     DNA formation factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RF-A (replication factor A); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     DNA formation factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RF-C (replication factor C); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
    Ribonucleoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RNA U1-containing, C; methods of determining individual hypersensitivity
to a
        pharmaceutical agent from gene expression profile)
TT
    Enzymes, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RNA-unwinding, helicases; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
TT
    Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RPS21, RPS24, RPS4X and S7; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Retinoid X receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RXRa; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Retinoid X receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RXRB; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
    Retinoid X receptors
IΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (RXR\gamma; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Rad50; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Rb, p107; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

```
(Rb; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Ref-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Rel-B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Retinoid X receptor alpha; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
    Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (S12; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (S21, S7 and RPS24; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
    (Biological study); PROC (Process)
        (S4, X-linked; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (S4; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Ribosomal proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (S9; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
ΙT
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SAA1 (serum amyloid A1); methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SAA2 (serum amyloid A2); methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SAA3 (serum amyloid A3); methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
```

```
Glycophosphoproteins
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SCP2 (hydroxy steroid-carrier protein 2); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Sialoglycoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SGP-2 (sulfoglycoprotein 2); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SII; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SMT3A and SMT3B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SOCS-1 (suppressor of cytokine signaling-1); methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SOCS-3 (suppressor of cytokine signaling-3); methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SQM1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SRE-BP (steroid-responsive element-binding protein), 2; methods of
        determining individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SRF (serum response factor); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Transcription factors
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (STAT1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (STAT2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (STAT3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Sec23B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Sod; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (SoxS; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (T cell activation gene 3; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
     Gene, animal
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (T-cell cyclphilin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (TCF-1 (T-cell factor 1); methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (TFIID (transcription factor IID); methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (TP53; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (TRADD; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
```

```
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (TRAF2 (tumor necrosis factor receptor-associated factor 2); methods of
        determining individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (UCP2; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (UDP-glucuronosyltransferase 2B; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Annexins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (V; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Transport proteins
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (VAChT (vesicular acetylcholine transporter); methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Cell adhesion molecules
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (VCAM-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (VCAM1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (VMAT; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Wnt-13; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (XP-C; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

```
(XRCC1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ZO-1; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (acute-phase, Major acute phase protein alpha-1; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (acyl CoA dehydrogenase; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
    (Biological study); PROC (Process)
        (adenine nucleotide translocator 1; methods of determining individual \( \)
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alc. dehydrogenase 2; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alc. dehydrogenase 4; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alpha-1 acid glycoprotein;
        methods of determining individual hypersensitivity to a pharmaceutical agent
        from gene expression profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alpha-2 macroglobulin; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alpha-catenin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alpha-tubulin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
    Macrophage inflammatory protein 2
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (alpha; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Macrophage
        (alveolar; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
ΙΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (amyloid homolog; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (annexin V; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Integrins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (antigens CD11a; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (antiquitin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (apolipoprotein AII; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (apolipoprotein CIII; methods of determining individual hypersensitivity to
а
        pharmaceutical agent from gene expression profile)
IΤ
     Cell cycle
        (arrest, genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Heart, disease
        (arrhythmia; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (aspartate aminotransferase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ataxia telangeictasia; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
IT
     Phagocytosis
        (autophagocytosis, genes associated with; methods of determining individual
```

```
hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Gene, animal
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (bcl-2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (bcl-3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Natural products, pharmaceutical
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (belladonna; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (beta actin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Potassium channel
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (beta subunit; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (bile acid-sodium-cotransporting; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (bile acid-transporting, bile salt export pump; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Biliary tract
        (bile duct, epithelium; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (bilirubin UDP-glucuronosyltransferase isoenzyme 1; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (biliverdin reductase; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
ΤТ
     Spreading
        (biol., genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
```

```
ΙT
     Macromolecular compounds
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (biol., prevention or repair of toxic damage of; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Neurotrophic factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (brain-derived; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (branched chain acyl-CoA oxidase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-Ha-ras; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
    'Gene, animal
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-abl; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TI
    Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-erbB2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Gene, animal
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-fms; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Gene, animal
     Transcription factors
    RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-fos; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Gene, animal
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-jun; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-myb; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-myc binding protein; methods of determining individual hypersensitivity
to
```

```
a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (c-myc; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (calbindin D; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (calnexin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (calprotectins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (calreticulin-B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (calreticulin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (carnitine palmitoyl CoA transferase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (caspase 1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (caspase 3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (caspase 7; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (caspase 8; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (catalase; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (catechol-O-Me transferase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (cathepsin L; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Phosphoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (caveolins, Caveolin-1; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
TT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (cdk4; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Connective tissue
        (cell; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IT
     Heart
     Lung
        (cells of; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Toxicity
        (cellular, genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ceruloplasmin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
    Biliary tract
TΤ
        (cholestasis; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Rhythm, biological
        (circadian, genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (clone 22 mRNA, alpha-1 splice variant; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

```
(clone RP-11-468G5; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Collagens, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (collagen-alginate; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (collagenase type I interstitial; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Intestine
        (colon; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (colony stimulating factor 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Estrogens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (conjugated; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (connexin 32; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (connexin 40; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (creatine kinase B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (cyclin D3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (cyclin G; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (cyclin dependent kinase inhibitor p27kip1; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
```

```
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (cytochrome c oxidase subunit IV; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Mitochondria
IT
        (damage, genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     DNA
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (damage, prevention; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cell differentiation
        (de-differentiation, genes associated with; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Cytokine receptors
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (death receptor 5; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (defender against cell death 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (defender against cell death-1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (delta like; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
    Mental disorder
TΨ
        (dementia; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Hematopoiesis
        (disorder, myelosuppression; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Elongation factors (protein formation)
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (eEF-1\alpha, PTI-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Glycophosphoproteins
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (endoplasmins; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
     Blood vessel
TΤ
        (endothelium; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TT
     Gene, animal .
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (enolase alpha; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Brain
        (ependyma, cells; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Lung
        (epithelium, columnar ciliated; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (exchange factor; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (excision repair ERCC3 and ERCC5 and ERCC6; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TT
     Kidney, disease
        (failure; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Carcinoembryonic antigen
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (family member 2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     Receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (farnesol receptor; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (fas antigen; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Liver, disease
        (fatty; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ferritin H-chain; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Muscle
        (fiber; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (flavin-containing monooxygenase 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (for γ-interferon inducible early response gene F; methods of
        determining individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Gene, animal
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (fosB; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gamma-glutamyl transpeptidase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gap junction-specific; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
IT
    Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gene ERCC1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Phosphoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gene L-myc; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gene RAD52; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gene cdc25; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     DNA formation factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gene dnaC; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Vascular endothelial growth factor receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (gene flt 1; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
 ΙT
     Phosphoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (gene fyn; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (gene gadd153; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Lipoproteins
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
         (gene ospA; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (gene pim-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Agranulocytosis
     Apoptosis
     Cell adhesion
     Cell aging
     Cell migration
     Mutation
     Neoplasm
     Recombination, genetic
     Signal transduction, biological
     Teratogenesis
     Transformation, genetic
         (genes associated with; methods of determining individual hypersensitivity
·to a
        pharmaceutical agent from gene expression profile)
IΤ
     Kidney, disease
         (glomerulitis; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (glucosylceramide synthase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (glutaredoxins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (glutathione S transferase theta-1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Gene, animal
ΤТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (glutathione peroxidase; methods of determining individual hypersensitivity
```

```
to a pharmaceutical agent from gene expression profile)
 IT
      Gene, animal
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (glutathione reductase; methods of determining individual hypersensitivity
 to
         a pharmaceutical agent from gene expression profile)
 TΤ
      Gene, animal
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (glutathione synthetase; methods of determining individual hypersensitivity
         to a pharmaceutical agent from gene expression profile)
ΙT
      Cell membrane
         (glycoprotein; methods of determining individual hypersensitivity to a
         pharmaceutical agent from gene expression profile)
 TT
      Intestine
         (goblet cell; methods of determining individual hypersensitivity to a
         pharmaceutical agent from gene expression profile)
 TT
      Gene, animal
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (growth arrest specific protein 1; methods of determining individual
         hypersensitivity to a pharmaceutical agent from gene expression
         profile)
ΙT
      Gene, animal
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (growth arrest specific protein 3; methods of determining individual
         hypersensitivity to a pharmaceutical agent from gene expression
         profile)
      Proteins, specific or class
 ΙT
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (growth arrest-specific protein 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
         profile)
. IT
      Proteins, specific or class
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (growth arrest-specific protein 3; methods of determining individual
         hypersensitivity to a pharmaceutical agent from gene expression
         profile)
ΙT
      Transcription factors
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (hSNF2b; methods of determining individual hypersensitivity to a
         pharmaceutical agent from gene expression profile)
      Proteins, specific or class
ΙT
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (hamartin, hamartin; methods of determining individual hypersensitivity to a
         pharmaceutical agent from gene expression profile)
ΙT
      Enzymes, biological studies
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (helicase ERCC3; methods of determining individual hypersensitivity to a
         pharmaceutical agent from gene expression profile)
      Transcription factors
 IT
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (helicase like; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (heme-binding, 23; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (hepatic lipase; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Liver
        (hepatocyte; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Immunophilins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (homolog ARA9; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΨ
    Allergy
        (hypersensitivity; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (hypoxanthine-guanine phosphoribosyltransferase; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
       expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (hypoxia inducible factor 1 alpha; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Vaccines
        (inactivated hepatitis; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
TT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (inhibitor of apoptosis protein 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (inhibitor of apoptosis protein 2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Kidney, disease
        (injury; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

(Biological study); PROC (Process)

```
(insulin-like growth factor 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (insulin-like growth factor binding protein 1; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Gene, animal
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (integrin beta-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (intercellular adhesion mol.-3; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Gene, animal
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (interferon inducible protein 15; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Cytokines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (interferon-inducible IP-10; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (involucrins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
    Natural products, pharmaceutical
TΤ
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (ipecac; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (iron permease FTR1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Disease, animal
        (irritation; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (junB; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
TΨ
     Transcription factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (junD; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
TT
     Kidney
        (juxtaglomerular cell; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
ΙT
     Animal cell
        (lacis; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Immunoglobulins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (lambda heavy chain; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Meninges
        (leptomeninges, cells; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (leukemia inhibitory factor; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Dyneins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (light chain 1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (lipopolysaccharide binding protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (lysyl oxidase; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IΤ
     Chemokines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (macrophage inflammatory protein 1, alpha and beta; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Macrophage migration inhibitory factor
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (macrophage inflammatory protein 3; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (macrophage-stimulating; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Lung
        (macrophage; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
ΙT
     Kidnev
        (macula densa; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (mannose receptor; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (mdm-2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (membrane; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Animal cell
        (meningothelial; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Kidney
        (mesangium; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Brain
        (mesenchymal, capillary endothelial and fibroblast cells; methods of
        determining individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
     Lipids, biological studies
ΤТ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (metabolism; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (metallothionein-IG; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Aging, animal
     Allergy
     Apparatus
     Astrocyte
     Bone
     Brain
     Bronchodilators
     Computer program
     DNA microarray technology
     Digestive tract
     Dione
     Drugs
     Eye
     Fibroblast
     Gallbladder
     Hepatitis
     Hyperplasia
     Hypertension
    Hypotension
     Immunosuppression
```

```
Inflammation
     Intestine
     Jaundice
     Kidney
     Leukemia
     Leukocyte
     Liver
     Macrophage
     Mast cell
     Muscle
     Mutagenesis
     Necrosis
     Nucleic acid hybridization
     Oligodendrocyte
     Ovary
     Pancreas
     Plantago psyllium
     Podophyllum (plant)
     Sex
     Skin
     Spleen
     Statistical analysis
     Stomach
     Testis
     Thyroid gland
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Proteins, specific or class
     cDNA
     mRNA
     RL: ANT (Analyte); BPR (Biological process); BSU (Biological study,
     unclassified); ANST (Analytical study); BIOL (Biological study); PROC
     (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Androgens
     Polyoxyalkylenes, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
TT
     APC protein
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Androgen receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Aromatic hydrocarbon receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

```
(methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 ΙT
      Biliproteins
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological'study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 ΙT
      CD14 (antigen)
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
. agent
         from gene expression profile)
 ΙT
      CD44 (antigen)
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 ΙT
      CFTR (cystic fibrosis transmembrane conductance regulator)
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 IT
      Cadherins
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 IT
      Caldesmon
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 ΙT
      Calnexin
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 IT
      Calreticulin
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 ΙT
      Carcinoembryonic antigen
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (methods of determining individual hypersensitivity to a pharmaceutical
 agent
         from gene expression profile)
 TΤ
      Clusterin
      RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Cyclophilins
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Dynamin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙΤ
     Eotaxin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Erythropoietin receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Estrogen receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
TΤ
     Fas antigen
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Fas ligand
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Fibronectin receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Filaggrin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Filamin
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Gelsolin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Glucocorticoid receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Gonadotropins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Hemopexins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Hepatocyte growth factor
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Hepatocyte growth factor receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Interleukin 10
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Interleukin 12
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin 13
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
```

```
ΙT
     Interleukin 18
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin la
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin 1B
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIÓL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Interleukin 2
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin 3
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Interleukin 4
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin 5
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin 6
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Interleukin 8
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
TΤ
     Lactoferrins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
```

```
from gene expression profile)
ΙT
     Leukemia inhibitory factor
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Lymphotoxin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Macrophage colony-stimulating factor receptors
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
    Mannose receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
    Mdm2 protein
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
    Monocyte chemoattractant protein-1
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
    Multidrug resistance proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Myelin basic protein
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
TT
     Neurofibromin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
TΥ
     Osteocalcins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
```

```
from gene expression profile)
ΙT
     Osteonectin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Osteopontin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Oxytocin receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Potassium channel
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Prion proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Probes (nucleic acid)
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Progesterone receptors
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Proliferating cell nuclear antigen
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Prostate-specific antigen
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     RANTES (chemokine)
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
```

```
from gene expression profile)
ΙT
     Stem cell factor
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     TCR (T cell receptors)
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Tau factor
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Tenascins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Thioredoxins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Thrombin receptors
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
TΤ
     Thrombomodulin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Transcortins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Transferrin receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Transferrins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
```

```
from gene expression profile)
IT
     Transforming growth factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Transthyretin
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
     Tropoelastins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
    Tumor necrosis factors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
     Urokinase-type plasminogen activator receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IΤ
    Vimentins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
ΙT
    Vitellogenins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
    neu (receptor)
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     p53 (protein)
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     Neuroglia
        (microglia cells; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
IT
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (mig-20r; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (monocyte chemotactic protein-1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (mss4; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (mtal; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (myelin basic protein; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (myeloid cell differentiation protein-1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (natural killer cell-enhancing factor B; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Proteins, specific or class
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (natural killer enhancing factor A; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (neomycin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Kidney, disease
        (nephritis; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Toxicity
        (nephrotoxicity; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Endocrine system
        (neuroendocrine system, cell; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
```

```
profile)
IT
     Nerve
        (neuron; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Toxins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (neurotoxins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Agranulocytosis
        (neutropenia; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (nucleic acid binding protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Animal cell
     Blood
     Blood serum
     Urine
        (nucleic acid or protein expression profile from; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (nucleic acid-binding; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (nucleoside diphosphate kinase beta isoform; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (octamer binding protein 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (oncosis associated; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (organic anion transporter 1; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΤT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (organic anion-transporting; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
```

```
Gene, animal
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ornithine decarboxylase; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (osteopontin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (oxygen regulated protein 150; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (oxysterol binding protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Cyclin dependent kinase inhibitors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p16INK4; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p190-B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Ras proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p21c-Ha-ras; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Cyclin dependent kinase inhibitors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p21CIP1/WAF1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cyclin dependent kinase inhibitors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p27KIP1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Tumor necrosis factor receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p55; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     Proteins, specific or class
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p55CDC; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Tumor necrosis factor receptors
```

IT

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (p75; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     Pancreas, disease
        (pancreatitis, genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (pancreatitis-associated protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Insecticides
        (pediculicides; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 109-A-2; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 117-B-2; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
     Gene, animal
TT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 134-A-2; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 134-A-4; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
    Gene, animal
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 149-B-3; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 239-A-2; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
    Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 240-A-4; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 244-A-2; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
```

```
(Biological study); PROC (Process)
        (penicillin band 69-B-3; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (penicillin band 77-C-2; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Nerve, disease
        (peripheral neuropathy; methods of determining individual hypersensitivity
to
        a pharmaceutical agent from gene expression profile)
ΙT
     Proteoglycans, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (perlecans; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisomal 3-oxoacyl-CoA thiolase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisomal acyl-CoA oxidase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisomal enoyl-CoA hydratase: 3-hydroxyacyl-CoA dehydrogenase;
        methods of determining individual hypersensitivity to a pharmaceutical agent
        from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisome assembly factor 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΤТ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisome assembly factor 2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisome assembly factor-1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisome biogenesis disorder protein 11; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
```

```
profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisome biogenesis disorder protein 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (peroxisome biogenesis disorder protein 4; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (phenol sulfotransferase; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
TT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (phenylalanine hydroxylase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (phosphoenolpyruvate carboxykinase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (phosphoglycerate kinase; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (phospholipase A2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Glycoproteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (plasma cell membrane; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
TΤ
    Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (plasminogen activator inhibitor 2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (platelet/endothelial cell adhesion mol.-1; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
```

profile)

Animal tissue

ΙT

```
Organ, animal
     Organelle
        (prevention or repair of toxic damage of; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Nucleotides, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (prevention or repair of toxic damage of; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Collagens, biological studies
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (procollagens, type I, alpha 1; methods of determining individual
       hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (prohibitin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (prohibitins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Peroxisome
        (proliferation, genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (proline-rich; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
    (Biological study); PROC (Process)
        (prostaglandin H synthase; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (protein tyrosine phosphatase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Proteins, general, biological studies
IT
     RL: BOC (Biological occurrence); BSU (Biological study, unclassified);
     BIOL (Biological study); OCCU (Occurrence)
        (proteinuria; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (prothymosin, alpha; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
```

TT

Proteins, specific or class

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (psoriasin, 1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Antibiotics
        (quinolone, fluoroquinolones; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Intestine
        (rectum; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Cvtokines
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (release' genes associated with; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (retinoic acid receptor gamma 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IΤ
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (retinol binding protein, CRBP-I (cellular retinol binding protein I);
       methods of determining individual hypersensitivity to a pharmaceutical agent
        from gene expression profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (retinol binding protein, CRBP-II (cellular retinol binding protein
        II); methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
    Eye, disease
ΙT
        (retinopathy; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Proteins, specific or class
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (senescence marker protein-30; methods of determining individual
       hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
    Animal cell
        (serous and brush; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
    Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (silencer of death domain; methods of determining individual
hypersensitivity
        to a pharmaceutical agent from gene expression profile)
TT
        (sinusoidal, hepatic venule endothelial cells; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
    Ribonucleoproteins
TΤ
```

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (small nuclear RNA-containing, B; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Muscle
        (smooth, cells; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Transport proteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (sodium taurocholate-cotransporting; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Hedgehog protein
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (sonic; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (spermidine/spermine N1-acetyltransferase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Disease, animal
        (steatosis; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Liver
        (stellate cell; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (stromelysin-1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (survivin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Phosphoproteins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (synapsins, I; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Heart, disease
        (tachycardia; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (thiol-specific antioxidant protein; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
```

```
(thioredoxin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     Gene, animal
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (thymidine kinase; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (thymidylate synthase; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
ΙT
     Kidney
     Liver
     Nerve
         (toxicity; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (transferrin receptor; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (transferrin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (transthyretin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
·IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (tryptophanyl-tRNA synthetase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (tsl1 gene encoding G1 progression protein; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Lung
         (type I cell; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Activin receptors
     Collagens, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (type II; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
         (ubiquitin conjugating enzyme; methods of determining individual
```

```
hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Enzymes, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (ubiquitin-conjugating, G2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Sterols
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (unsatd., Stanol, esters; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (urokinase plasminogen activator receptor; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
TΤ
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (vascular endothelial growth factor receptor 1; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
IT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (very-long-chain acyl-CoA-dehydrogenase; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (vimentin; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
    Epithelium
        (visceral, parietal and tubular; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (visinin-like peptide; methods of determining individual hypersensitivity to
        a pharmaceutical agent from gene expression profile)
ΙT
    Proteins, specific or class
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (x13694; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Gene, animal
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (zinc finger protein 37; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
TT
     Crystallins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\zeta-crystallins; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
     Interferons
ΙT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (\alpha-2b); methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Tubulins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\alpha-; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Thyroid hormone receptors
       \alpha 1-Acid glycoprotein
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\alpha 1; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     Catenins
     Integrins
     Interferons
     Peroxisome proliferator-activated receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (a; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Macroglobulins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\alpha 2-; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Microglobulins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\alpha 2-microglobulins, \alpha - 2 microglobulin; methods of determining
        individual hypersensitivity to a pharmaceutical agent from gene
        expression profile)
ΙT
     Chemokine receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (β chemokine receptor CCR2; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
     Chemokine receptors
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\beta \text{ chemokine receptor CCR5; methods of determining individual})
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     Actins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\beta-; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Interferons
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (\beta 1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
```

```
Integrins
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (β1; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Integrins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (β2; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Integrins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (β4; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Fibrinogens
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\gamma chain; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     Actins
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\gamma-actins; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     Interferons
     Peroxisome proliferator-activated receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\gamma); methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     9038-14-6, Flavin containing monooxygenase
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (1 and 3; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
                 9076-57-7, Histone deacetylase
                                                   52660-18-1
IT
     9059-22-7
     Bilirubin-UDP-glucuronosyltransferase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (1; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     9030-08-4, UDP-glucuronosyltransferase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (2 and 2B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     22916-47-8, Miconazole
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (2% cream; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     9037-14-3, 5-Aminolevulinate synthase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (2, gene for; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     134678-17-4, Lamivudine
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
```

```
study, unclassified); BIOL (Biological study)
        (3TC; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     99011-02-6, Imiquimod
ΙT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (5% cream; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     9001-66-5
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (A and B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     9001-60-9, Lactate dehydrogenase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (B; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     8064-90-2, Trimeth/sulfa
ΙT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (Co-trimoxazole; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
IT
     9015-85-4
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (I and III and IV; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     9001-16-5, Cytochrome C oxidase
TT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (I, II and III, gene for; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
     9001-03-0
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (III; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
     79871-54-8, Norgestimate-ethinyl estradiol mixture
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (Norgestimate/ethinyl estradiol; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
IT
     50812-37-8, Glutathione S-transferase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (Ya, theta-1, and alpha subunit; methods of determining individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     9014-08-8, Enolase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (alpha; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     58-82-2, Bradykinin
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (antagonist; methods of determining individual hypersensitivity to a
```

```
pharmaceutical agent from gene expression profile)
     9001-15-4
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (b; methods of determining individual hypersensitivity to a pharmaceutical
        agent from gene expression profile)
IT
     76901-00-3, Acetyl, hydrolase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (beta subunit; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     66722-44-9, Bisoprolol
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (bisoprolol/HCTZ; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     9005-32-7, Alginic acid
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (collagen-alginate; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     7440-57-5, Gold, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (compds.; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     9054-89-1, Superoxide dismutase
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (copper-zinc-containing and manganese-containing; methods of determining
individual
        hypersensitivity to a pharmaceutical agent from gene expression
        profile)
ΙT
     154248-97-2, Imiglucerase
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (injection; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     56-81-5, Glycerol, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
        (iodinated; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
                               50-06-6, Phenobarbital, biological
ΙT
     50-02-2, Dexamethasone
               50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone
     studies
                              50-28-2, Estradiol, biological studies 50-48-6, Amitriptyline 50-55-5, Rese
     50-24-8, Prednisolone
     50-44-2, 6-Thiopurine
50-76-0, Actinomycin D
                                                         50-55-5, Reserpine
                              50-78-2, Aspirin 5
51-34-3, Scopolamine
                                                   51-06-9, Procainamide
                                                       51-48-9, Levothyroxine,
     51-21-8, Fluorouracil
                           51-49-0, Dextrothyroxine 51-75-2, Mechlorethamine
                                                        51-55-8, Atropine,
     biological studies
                                                        52-01-7, Spironolactone
     biological studies
     52-53-9, Verapamil 52-67-5, Penicilla 53-03-2, Prednisone 53-06-5, Cortisone
                                                     52-86-8, Haloperidol
                           52-67-5, Penicillamine
                                                53-19-0,
     Mitotane 53-33-8, Paramethasone
                                         53-86-1, Indomethacin
                             54-11-5, Nicotine
                                                  54-31-9, Furosemide
                                                                          54-36-4,
     54-05-7, Chloroquine
                   54-85-3, Isoniazid
                                         55-63-0, Nitroglycerin
                                                                 55-65-2,
     Metyrapone
                     55-98-1, Busulfan
                                          56-54-2, Quinidine
                                                                56-75-7,
     Guanethidine
                                                57-41-0, Phenytoin
                        57-22-7, Vincristine
                                                                       57-53-4,
     Chloramphenicol
     Meprobamate 57-63-6, Ethinyl estradiol 57-66-9, Probenecid
                                                                          57-83-0,
```

Progestin, biological studies 57-96-5, Sulfinpyrazone 58-14-0, Pyrimethamine 58-32-2, Dipyridamole Leucovorin 58-39-9, 58-54-8, Ethacrynic acid 58-55-9, Theophylline, Perphenazine biological studies 58-61-7, Adenosine, biological studies 58-74-2, 58-93-5, Hydrochlorothiazide 58-94-6, Thiazide Papaverine 59-42-7, Phenylephrine 59-43-8, Thiamine, biological Methotrexate 59-92-7, Levodopa, biological studies 59-99-4, Neostigmine studies 60-40-2, Mecamylamine 60-54-8, Tetracycline 60-79-7, Ergonovine 60-87-7, Promethazine 61-32-5, Methicillin 61-72-3, Cloxacillin 64-75-5, Tetracycline hydrochloride 64-77-7, Tolbutamide 64-86-8 64-86-8, Colchicine 65-23-6, Pyridoxine 66-79-5, Oxacillin 66-97-7, Psoralen 67-20-9, Nitrofurantoin 67-45-8, Furazolidone 67-68-5, Dimethyl sulfoxide, biological studies 68-22-4D, Norethindrone, mixture with 68-41-7, Cycloserine 68-88-2, Hydroxyzine 69-53-4, -7, biological studies 69-89-6, Xanthine 73-24-5, ethinyl estradiol Ampicillin 69-72-7, biological studies 6-Aminopurine, biological studies 73-31-4, Melatonin 76-42-6, 77-09-8, Phenolphthalein 76-57-3, Codeine 77-19-0, Oxycodone 77-36-1, Chlorthalidone 78-44-4, Carisoprodol 80-08-0, 23-2, Dehydrocholic acid 81-81-2, Warfarin 82-92-8, Dicyclomine 81-23-2, Dehydrocholic acid Dapsone Cyclizine 82-95-1, Buclizine 83-43-2, Methylprednisolone 83-73-8, Iodoquinol 86-54-4, Hydralazine 83-89-6, Quinacrine 89-57-6, Mesalamine 83-98-7, Orphenadrine 90-34-6, Primaquine 90-82-4, Pseudoephedrine 91-64-5, Coumarin 92-84-2, Phenothiazine 93-14-1, Guaifenesin 94-36-0, Benzoyl peroxide, biological studies 92-13-7, Pilocarpine 94-20-2, Chlorpropamide 94-78-0, Phenazopyridine 97-77-8, Disulfiram 99-66-1, 95-25-0, Chlorzoxazone 96-64-0, Soman Valproic acid 100-33-4, Pentamidine 100-97-0, Methenamine, biological 101-31-5, Hyoscyamine 103-90-2, Acetaminophen 113-18-8, studies 113-42-8, Methylergonovine 1 aromycin 114-86-3, Phenformin Ethchlorvynol 113-45-1, Methylphenidate 114-07-8, Erythromycin 118-42-3, 122-09-8, Phentermine 123-56-8, Succinimide Hydroxychloroquine 123-63-7, Paraldehyde 124-94-7, Triamcinolone 125-29-1, 125-33-7, Primidone 125-64-4, Methyprylon Hydrocodone 126-07-8, Griseofulvin Dextromethorphan 125-84-8, Aminoglutethimide 126-52-3, Ethinamate 127-07-1, Hydroxyurea 127-69-5, Sulfisoxazole 128-13-2, Ursodiol 130-95-0, Quinine 132-17-2, Benztropine 133-10-8, 137-58-6, Lidocaine Sodium p-aminosalicylate 138-56-7, 144-11-6, Trihexyphenidyl Trimethobenzamide 147-52-4, Nafcillin 147-94-4, AraC 148-82-3, Melphalan 154-21-2, Lincomycin 154-42-7, Thioguanine 154-93-8, Carmustine 155-97-5, Pyridostigmine 298-46-4, 5H-Dibenz[b,f]azepine-5-carboxamide 298-50-0, Propantheline 300-62-9D, Amphetamine, mixed 300-62-9D, Amphetamine, mixed Ephedrine 302-17-0, Chloral hydrate 302-79-4, Tretinoin 303-53-7, salts Cyclobenzaprine 305-03-3, Chlorambucil 315-30-0, Allopurinol 321-64-2, Tacrine 346-18-9, Polythiazide 361-37-5, Methyserg 363-24-6, Dinoprostone 364-62-5, Metoclopramide **378-44-9**, Betamethasone 389-08-2, Nalidixic acid 395-28-8, Isoxsuprine 361-37-5, Methysergide 439-14-5, Diazepam 443-48-1, Metronidazole 446-86-6, Azathioprine 463-04-7, Amyl nitrite 456-59-7, Cyclandelate 469-62-5, Propoxyphene 461-72-3, Hydantoin 474-25-9, Chenodiol 480-30-8, 484-23-1, Dihydralazine 503-01-5, Isometheptene Dichloralphenazone 520-85-4, Medroxyprogesterone 525-66-6, 512-15-2, Cyclopentolate 526-36-3, Xylometazoline 536-33-4, Ethionamide 541-15-1, Propranolol Levocarnitine 546-88-3, Acetohydroxamic acid 555-30-6, Methyl dopa 577-11-7, Docusate sodium 564-25-0, Doxycycline 569-65-3, Meclizine 596-51-0, Glycopyrrolate 599-79-1, Sulfasalazine 603-50-9, Bisacodyl 634-03-7, Phendimetrazine 637-07-0, Clofibrate 657-24-9, Metformin 671-16-9, Procarbazine 672-87-7, Metyrosine 674-38-4, Bethanechol 723-46-6, Sulfamethoxazole 738-70-5, Trimethoprim 745-65-3,

Alprostadil 791-35-5, Chlophedianol 797-63-7, Levonorgestrel 797-64-8D, L-Norgestrel, ethinyl estradiol mixture 846-49-1, Lorazepam 846-50-4, Temazepam 911-45-5, Clomiphene 915-30-0, Diphenoxylate 962-58-3, Diazoxon 968-93-4, Testolactone 972-02-1, Diphenidol 990-73-8, Fentanyl citrate 1134-47-0, Baclofen 1143-38-0, Anthralin 1321-13-7, Potassium aminobenzoate 1397-89-3, Amphotericin B 1400-61-9, Nystatin 1404-04-2, Neomycin 1404-04-2D, Neomycin, mixture 1404-90-6, Vancomycin 1406-05-9, Penicillin etazoline 1622-61-3, Clonazepam 1953-02-2, 1 with polymx/HC 1491-59-4, Oxymetazoline 1953-02-2, Tiopronin 1977-10-2, Loxapine 2152-34-3, Pemoline 2152-44-5, Betamethasone valerate 2447-57-6, Sulfadoxine 2451-01-6, Terpin 2609-46-3, Amiloride 2809-21-4 hvdrate 2998-57-4, Estramustine 3116-76-5, Dicloxacillin 3313-26-6, Thiothixene 3385-03-3, 3485-14-1, Cyclacillin 3737-09-5, Disopyramide Flunisolide 3778-73-2, Iphosphamide RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (methods of determining individual hypersensitivity to a pharmaceutical agent from gene expression profile) 3930-20-9, Sotalol 4205-90-7, Clonidine **4419-39-0**, Lactulose 4697-36-3, Carbenicillin 4759-48-2, Isotretinoin 5051-62-7, Guanabenz 6493-05-6, 5786-21-0, Clozapine

IT Beclomethasone 4499-40-5, Oxtriphylline, biological studies 4618-18-2, 5543-57-7, (s)-Warfarin 5633-20-5, Oxybutynin 6190-39-2, Dihydroergotamine mesylate 6493-05-6621-47-2, Perhexiline 7020-55-5, Clidinium carotene 7261-97-4, Dantrolene 7416-34-4, N Pentoxifvlline 7235-40-7, Beta carotene 7261-97-4, Dantrolene 7416-34-4, Molindone 7439-93-2, Lithium, biological studies 7447-40-7, Potassium chloride, 7416-34-4, Molindone biological studies 7481-89-2, Zalcitabine 7487-88-9, Magnesium sulfate, biological studies 7648-98-8, Ambenonium 7681-11-0, Potassium 7683-59-2, 7681-93-8, Natamycin iodide, biological studies 8029-99-0, Paregoric 8049-47-6, Pancreatin 8050-81-5, Isoproterenol Simethicone 8063-07-8, Kanamycin 8067-24-1, Ergoloid mesylates 9001-27-8, BLood-coagulation factor VIII 9001-75-6, Pepsin 9004-10-8, Insulin, biological studies 9004-67-5, Methyl cellulose 9005-49-6, Enoxaparin, biological studies 9007-92-5, Glucagon, biological studies 9046-56-4, Ancrod 10118-90-8, Minocycline 9039-53-6, Urokinase 10262-69-8, Maprotiline 10540-29-1, Tamoxifen 10238-21-8, Glyburide Lestyramine 11056-06-7, Bleomycin 11111-12-9, 12174-11-7, Attapulgite 12244-57-4, Gold sodium 11041-12-6, Cholestyramine Cephalosporin thiomalate 12650-69-0, Mupirocin 12794-10-4D, Benzodiazepine, derivs. 13010-47-4, Lomustine 13292-46-1, Rifampin 13311-84-7, Flutamide 13392-28-4, Rimantadine 13647-35-3, Trilostane 14028-44-5 14124-50-6 14611-51-9, Selegiline 14769-73-4, Levamisole 14028-44-5, Amoxapine 14838-15-4, Phenylpropanolamine 14882-18-9, Bismuth subsalicylate 15301-69-6, 15307-86-5, Diclofenac 15663-27-1, Cisplatin 15687-27-1, Ibuprofen 15722-48-2, Olsalazine Flavoxate 15686-71-2, 15687-27-1, Ibuprofen Cephalexin 16051-77-7, Isosorbide mononitrate 16068-46-5, Potassium phosphate 16110-51-3, 16590-41-3, Naltrexone 16679-58-6, Desmopressin 17784-12-2, Sulfacytine 18323-44-9, Clindamycin 17230-88-5, Cromolyn Danazol 18559-94-9, 18883-66-4, Streptozocin 20537-88-6, Amifostine 20 Albuterol 19216-56-9, Prazosin 19794-93-5, 20830-75-5, Digoxin 20830-81-3, 21829-25-4, Nifedipine 22204-53 Trazodone 21256-18-8, Oxaprozin Daunomycin 22204-53-1, Naproxen 22232-71-9, Mazindol 23031-32-5, Terbutaline sulfate 23214-92-8, Doxorubicin 23288-49-5, Probucol 25322-68-3, Polyethylene 25451-15-4, Felbamate 25614-03-3, Bromocriptine 25812-30-0, glycol 26787-78-0, Amoxicillin 26652-09-5, Ritodrine Gemfibrozil 26807-65-8, Indapamide 26839-75-8, Timolol 27203-92-5, Tramadol 27262-47-1, Levobupivacaine 27686-84-6, Masoprocol 28395-03-1,

```
Bumetanide
                        28657-80-9, Cinoxacin 28782-42-5, Difenoxin
                                                                                           28860-95-9,
                       28911-01-5, Triazolam 28981-97-7, Alprazolam
       Carbidopa
                                                                                           29094-61-9,
                       29110-47-2, Guanfacine
                                                        29122-68-7, Atenolol
       Glipizide
                                                                                          30516-87-1,
                         31441-78-8, Mercaptopurine
       Zidovudine
                                                                 31677-93-7, Bupropion
       hydrochloride
                             31828-71-4, Mexiletine
                                                               31883-05-3, Moricizine
       32986-56-4, Tobramycin 33069-62-4, Paclitaxel 33419-42-0, Etoposide 34089-81-1, Sodium ferric gluconate 35189-28-7, Norgestimate
       36322-90-4, Piroxicam 36505-84-7, Buspirone 36791-04-5, Ribavirin 38304-91-5, Minoxidil 40180-04-9, Tienilic acid 40580-59-4, Guanac
                                                                              40580-59-4, Guanadrel
       41575-94-4, Carboplatin 41708-72-9, Tocainide 42399-41-7, Diltiazem 42924-53-8, Nabumetone 49562-28-9, Fenofibrate 50679-08-8, Terfenadi
      42924-53-8, Nabumetone 49562-28-9, Fenofibrate 50679-08-8, Terfenadine 50925-79-6, Colestipol 50972-17-3, Bacampicillin 51022-71-0, Nabilone 51110-01-1, Somatostatin 51333-22-3, Budesonide 51384-51-1,
                                                                           50679-08-8, Terfenadine
                       51333-22-3, Budesonide 51384-51-1, 51481-61-9, Cimetidine 53179-11-6, Loperamide 53608-75-6, Pancrelipase 53714-56-0. Leuprolidate Cefaclor 54004.00
       Metoprolol
                                                                                            53230-10-7,
       Mefloquine
                                                              53714-56-0, Leuprolide
       53994-73-3, Cefaclor
                                     54024-22-5, Desogestrel 54063-53-5, Propafenone
       54143-56-5, Flecainide acetate
                                                   54182-58-0, Sucralfate
                                                                                       54350-48-0,
       Etretinate
                        54573-75-0, Doxercalciferol 54910-89-3, Fluoxetine
      55142-85-3, Ticlopidine
                                          55268-75-2, Cefuroxime
                                                                             55985-32-5, Nicardipine
       56420-45-2, Epirubicin
                                                           58581-89-8, Azelastine 59122-46-2,
                                         58001-44-8
                          59277-89-3, Acyclovir
                                                           59729-33-8, Citalopram
                                                                                              59865-13-3,
      Misoprostol
       Cyclosporine A 60142-96-3, Gabapentin 60205-81-4, Ipratropium
                        Menotropin 61718-82-9, Fluvoxamine maleate 61869-0
62571-86-2, Captopril 63585-09-1, Foscarnet sodium
       61489-71-2, Menotropin
                                                                                        61869-08-7,
       Paroxetine
      63590-64-7, Terazosin 64952-97-2, Latamoxef 65141-46-0, Nicorandil 65277-42-1, Ketoconazole 66085-59-4, Nimodipine 66104-22-1, Pergol
                                                                              66104-22-1, Pergolide
       66357-35-5, Ranitidine 66376-36-1, Alendronate
                                                                             67227-57-0, Fenoldopam
                    68475-42-3, Anagrelide 68844-77-9, Astemizole
                                                                                           69049-73-6,
      mesylate
      Nedocromil
                         69123-98-4, Fialuridine
                                                            69655-05-6, Didanosine
       70359-46-5, Brominide tartrate 70989-04-7, S-Mephenytoin
                                                                                         71320-77-9,
      Moclobemide
                          72432-03-2, Miglitol
                                                          72509-76-3, Felodipine
                                                                                            72956-09-3,
      Carvedilol
                         73590-58-6, Omeprazole
                                                           74103-06-3, Ketorolac
                                                                                            74191-85-8,
                       75330-75-5, Lovastatin 75695-93-1, Isradipine 75706-12-6, 75847-73-3, Enalapril 76470-66-1, Loracarbef 76547-98-3, 76568-02-0, Flosequinan 76584-70-8 76824-35-6, Famotidine Nafarelin 76963-41-2, Nizatidine 78110-38-0, Aztreonam
       Doxazosin
      Leflunomide
      Lisinopril 76568-02-076932-56-4, Nafarelin
      78628-80-5, Terbinafine hydrochloride 79516-68-0, Levocabastine 79617-96-2, Sertraline 79794-75-5, Loratadine 79902-63-9, Simma 80125-14-0, Remoxipride 80474-14-2, Fluticasone propionate 81093-37-0, Pravastatin 81098-60-4, Cisapride 81103-11-9,
                                        79794-75-5, Loratadine 79902-63-9, Simvastatin
      Clarithromycin
                             81669-57-0, Anistreplase 82410-32-0, Ganciclovir
      82419-36-1, Ofloxacin 82626-48-0, Zolpidem 82834-16-0, Perindopril 83366-66-9, Nefazodone 83799-24-0, Fexofenadine 83881-51-0, Cetiris
                                                                             83881-51-0, Cetirizine
      83905-01-5, Azithromycin 84057-84-1, Lamotrigine
                                                                                84449-90-1,
      Raioxirene 84625-61-6, Itraconazole 85441-61-8, Quinapril 85721-33-1, Ciprofloxacin 86386-73-4, Fluconazole 86541-79 Benazepril 87333-19-5 Paminoil 07620 27
                                                                                 86541-75-5,
                                                      87679-37-6, Trandolapril
89365-50-4, Salmeterol 8
                        87333-19-5, Ramipril
      Benazepril
                                                                                              88040-23-7,
                      88150-42-9, Amlodipine
      Cefepime
                                                                                          89778-26-7.
                                                       91714-94-2, Bromfenac
       Toremifene 90566-53-3, Fluticasone
       92665-29-7, Cefprozil 93390-81-9, Fosphenytoin
      RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); BIOL (Biological study)
           (methods of determining individual hypersensitivity to a pharmaceutical
agent
           from gene expression profile)
      93413-69-5, Venlafaxine 93479-97-1, Glimepiride Fluvastatin 95058-81-4, Gemcitabine 95233-18-4
                                                                              93957-54-1,
                                                              95233-18-4, Atovaquone
      96036-03-2, Meropenem 97322-87-7, Troglitazone 97519-39-6, Ceftibuten 97534-21-9, Merbarone 97682-44-5, Irinotecan 98048-97-6, Fosinopril
```

IT

98319-26-7, Finasteride 100986-85-4, Levofloxacin 102767-28-2, Levetiracetam 103577-45-3, Lansoprazole 103628-46-2, Sumatriptan 104632-26-0, Pramipexole 105102-22-5, 105857-23-6, Alteplase 106133-20-4, 104227-87-4, Famciclovir Mometasone 105462-24-6 Tamsulosin 106266-06-2, Risperidone 106392-12-5, Poloxamer 188 106650-56-0, Sibutramine 107753-78-6, Zafirlukast 107868-30-4, Exemestane 109889-09-0, Granisetron 111025-46-8, Pioglitazone Exemestane 109889-09-0, Granisetron 111025-40-0, Flogificazone 112809-51-5, Letrozole 112965-21-6, Calcipotriene 114798-26-4, 115103-54-3, Tiagabine 115956-13-3, Dolasetron mesylate Losartan 119383-00-5 116644-53-2, Mibefradil 117976-89-3, Rabeprazole 120014-06-4, Donepezil 119914-60-2, Grepafloxacin 121679-13-8, 122320-73-4, Rosiglitazone 122647-32-9, Ibutilide fumarate Naratriptan 122852-42-0, Alosetron 123948-87-8, Topotecan 124937-51-5, Tolterodine yearbophil 127779-20-8, Saquinavir 126040-58-2, Calcium polycarbophil 127779-20-8, Saquinavir 129311-55-3, Ganirelix acetate 129318-43-0, Alendronate sodium 129618-40-2, Navirapine 130209-82-4, Latanoprost 130929-57-6, Entacapone 134308-13-7, Tolcapone 134523-00-5, Atorvastatin 137862-53-4, Valsartan 138402-11-6, Irbesartan 143003-46-7, Alglucerase 144494-65-5, Tirofiban 144701-48-4, Telmisartan 145599-86-6, Cerivastatin 147059-72-1, Trovafloxacin 147245-92-9, Copolymer 1 150378-17-9, Indinavir 151096-09-2, Moxifloxacin 161814-49-9, Amprenavir 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 172820-23-4, Pexiganan acetate 180288-69-1, Trastuzumab 185243-69-0, Etanercept 188627-80-7, Eptifibatide 339524-26-4, Amiodorone 339524-30-0, Cyclopegic 339524-35-5, Cytoxin 3395 339524-50-4, Hyperozia RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (methods of determining individual hypersensitivity to a pharmaceutical agent

from gene expression profile)

107-97-1, Sarcosin 447-41-6, Nylidrin 8056-51-7 aminotransferase 9000-97-9 9001-05-2, Catalase 9000-86-6, Alanine IT 9001-40-5, Glucose-6-phosphate dehydrogenase 9001-48-3, Glutathione reductase 9001-50-7, Glyceraldehyde 3-phosphate dehydrogenase 9001-62-1, Hepatic lipase 9001-84-7, Phospholipase A2 9002-03-3, Dihydrofolate reductase 9002-06-6, Thymidine kinase 9002-12-4, Urate oxidase 9002-67-9, Luteinizing hormone 9003-99-0, Myeloperoxidase 9012-25-3, Catechol-O-methyltransferase 9012-38-8, PAPS synthetase 9012-39-9 9012-52-6, S-Adenosylmethionine synthetase 9013-08-5, Phosphoenolpyruvate carboxykinase 9013-18-7, Fatty acyl-CoA synthetase 9013-38-1, Dopamine β-hydroxylase 9013-66-5, Glutathione peroxidase 9014-55-5, Tyrosine 9013-79-0, Neuropathy target esterase 9015-71-8, Corticotropin releasing hormone 9015-81-0, aminotransferase 17-β Hydroxysteroid dehydrogenase 9016-12-0, Hypoxanthine-guanine phosphoribosyltransferase 9023-44-3, Tryptophanyl-tRNA synthetase 9023-62-5, Glutathione synthetase 9023-64-7, γ -Glutamylcysteinyl synthetase 9023-70-5, Glutamine synthetase 9024-60-6, Ornithine 9024-61-7, Histidine decarboxylase 9025-32-5, Prolidase decarboxvlase 9026-00-0, Cholesterol esterase 9026-09-9, Phenol sulfotransferase 9026-43-1, Serine kinase 9026 9027-13-8, Enoyl-CoA hydratase 9026-51-1, Nucleoside diphosphate kinase 9027-65-0, Acyl-CoA dehydrogenase 9028-06-2 9028-31-3, Aldose reductase 9028-35-7, HMG CoA reductase 9028-41-5, Hydroxyacyl-Coenzyme A dehydrogenase 9028-86-8, Aldehyde 9028-35-7, HMG CoA reductase 9029-73-6, Phenyl alanine hydroxylase 9029-80-5, dehydrogenase Histamine N-methyltransferase 9029-97-4, 3-Ketoacyl-CoA thiolase 9031-37-2, Ceruloplasmin 9031-54-3, Sphingomyelinase 9031-61-2, 9032-20-6, Thymidylate synthase 9031-72-5, Alcohol dehydrogenase 9032-76-2 9035-58-9, Blood-coagulation factor III DT-Diaphorase

9036-22-0, Tyrosine hydroxylase 9037-21-2, Tryptophan hydroxylase 9037-62-1, Glycyl tRNA synthetase 9039-06-9, NADPH cytochrome P450 9040-57-7, Ribonucleotide reductase 9041-92-3 reductase 9045-77-6, Fatty acid synthase 9046-27-9, γ -Glutamyl transpeptidase 9055-67-8, Poly(ADP-ribose)polymerase 9048-63-9, Epoxide hydrolase 9059-25-0, Lysyl oxidase 9068-41-1, Carnitine palmitoyltransferase 9074-02-6, Malic enzyme 9074-10-6, Biliverdin reductase 9074-19-5, Hydratase 9074-87-7, γ-Glutamyl hydrolase 9081-36-1, 25-Hydroxyvitamin D3 1-hydroxylase 11096-26-7, Erythropoietin 37205-63-3, ATP synthase 37237-44-8, Glucosylceramide synthase 37289-06-8, Acid ceramidase 37292-81-2, Cytochrome p 450 11A1 37289-06-8, Acid ceramidase 37292-81-2, Cytochrome p 450 11A1 37318-49-3, Protein disulfide isomerase 39391-18-9, Prostaglandin H 56093-23-3, α -1,2-Fucosyl transferase 56645-49-9, 59536-73-1, Phosphomannomutase 59536-74-2, Very long-chain Cathepsin G acyl-CoA dehydrogenase 60267-61-0, Ubiquitin 60616-82-2, Cathepsin L 61116-22-1, Fatty acyl-CoA oxidase 62229-50-9, Epidermal growth factor 67339-09-7, Thiopurine methyltransferase 67763-96-6, Insulin-like growth 67763-96-6, Insulin-like growth factor 1 67763-97-7, Insulin-like growth factor II 77271-19-3, 6-O-Methylguanine-DNA methyltransferase 77847-96-2, Prostacyclinstimulating factor 79747-53-8, Protein tyrosine phosphatase 79955-99-0, Stromelysin-1 80146-85-6, Tissue Transglutaminase 80295-41-6, Complement component C3 81627-83-0, Colony stimulating factor -1 82391-43-3, 12-Lipoxygenase 83268-44-4 83869-56-1, . Granulocyte-macrophage colony-stimulating factor 85637-73-6, Atrial natriuretic factor 87397-91-9, Thymosin $\beta10$ 88943-21-9, Proteinase $\alpha 1$ -inhibitor III 89964-14-7, Prothymosin, alpha 90698-26-3, Ribosomal protein S6 kinase 96024-44-1, Granulin 105238-46-8, Macropain 106096-92-8, Fibroblast growth factor, acidic 106956-32-5, Oncostatin M 112130-98-0, Procathepsin L 114949-22-3, Activin (protein) 117698-12-1, Paraoxonase 119418-04-1, Galanin 123626-67-5, Endothelin-1 122191-40-6, Caspase-1 125978-95-2, Nitric 127464-60-2, Vascular endothelial growth factor oxide synthase 137632-07-6, Extracellular-signal-regulated kinase 1 138238-81-0, Endothelin converting enzyme-1 140208-24-8, Tissue inhibitor of 141176-92-3 141349-86-2, Cyclin dependent kinase 2 metalloproteinase-1 141436-78-4, Protein kinase C 142243-03-6, Plasminogen activator 142805-56-9, DNA topoisomerase II 142805-58-1, MAP kinase inhibitor 2 143180-75-0, DNA topoisomerase I 143375-65-9, Cyclin dependent kinase kinase 1 145809-21-8, Tissue inhibitor of metalloproteinase-3 146480-35-5, Matrix metalloproteinase-2 147014-97-9, Cyclin dependent 148348-15-6, Fibroblast growth factor 7 149316-81-4, Branched kinase 4 chain acyl-CoA oxidase 149371-05-1, Kinase (phosphorylating), gene c-abl 149885-78-9, Hepatocyte growth factor activator protein 154907-65-0, Checkpoint kinase 155807-64-0, FEN-1 Endonuclease 165245-96-5, p38 Mitogen-activated protein kinase 169592-56-7, CPP32 proteinase 179241-70-4, Protein kinase ZPK 179241-78-2, Caspase 8 18237 182372-14-1, 182372-15-2, Caspase 6 182762-08-9, Caspase 4 189258-1-192465-11-5, Caspase 5 193363-12-1, Vascular endothelial Caspase 2 189258-14-8, Caspase 7 growth factor D 194554-71-7, Tissue factor pathway inhibitor 205944-50-9, Osteoprotegerin 220983-94-8, Sorbitol dehydrogenase 289898-51-7, JNK1 protein kinase 303752-61-6, DNA dependent protein 329736-03-0, Cytochrome p450 3A4 329764-85-4, Cytochrome p450 kinase 329978-01-0, Cytochrome p450 2C9 329900-75-6, Cyclooxygenase 2 330196-64-0, Cytochrome p450 1A2 330196-93-5, Cytochrome p450 2E1 330207-10-8, Cytochrome p450 2B1 330589-90-7, Cytochrome p450 2C19 330596-22-0, Cytochrome p450 1B1 330597-62-1, Cytochrome p450 2D6 330975-22-9, Macrostatin 331462-97-6, Cytochrome p450 2B2 331462 330589-90-7, Cytochrome p450 2C19 331462-98-7, 331823-00-8, Cytochrome p450 2C11 331823-12-2, Cytochrome p450 3A1 331823-27-9, Cytochrome p450 2A1 331827-06-6, Cytochrome p450 2C12

```
Cytochrome p450 2A6
                            332847-52-6, Cytochrome p450 4A
                                                                336884-26-5,
     Cytochrome p450 2B10
                             338964-08-2, P 450 17A
                                                       338969-62-3, P 450 2A3
     338969-69-0, P 450 2F2
                               338969-71-4, P 450 4A1
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (methods of determining individual hypersensitivity to a pharmaceutical
agent
        from gene expression profile)
IT
     9004-02-8, Lipoprotein lipase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (precursor; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     80449-02-1, Tyrosine protein kinase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (receptor; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     9000-83-3, ATPase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (subunit 6; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     9025-75-6
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (subunit B; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
ΙT
     9079-67-8, NADH oxidoreductase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (subunit MWFE, gene for; methods of determining individual hypersensitivity
        to a pharmaceutical agent from gene expression profile)
ΙT
     9041-46-7
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (type II; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     9001-12-1, Collagenase
IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (type-1 interstitial; methods of determining individual hypersensitivity to
a
        pharmaceutical agent from gene expression profile)
     60382-71-0, Diacylglycerol kinase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (zeta; methods of determining individual hypersensitivity to a
pharmaceutical
        agent from gene expression profile)
     9012-90-2
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (\alpha and \beta; methods of determining individual hypersensitivity to a
        pharmaceutical agent from gene expression profile)
     50-02-2, Dexamethasone 50-23-7, Hydrocortisone 50-24-8, Prednisolone 53-03-2, Prednisone
     53-06-5, Cortisone 53-33-8, Paramethasone 83-43-2, Methylprednisolone 124-94-7, Triamcinolone
```

378-44-9, Betamethasone 2152-44-5, Betamethasone valerate 3385-03-3, Flunisolide 4419-39-0, Beclomethasone 51333-22-3, Budesonide 80474-14-2, Fluticasone propionate 90566-53-3, Fluticasone 105102-22-5, Mometasone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(methods of determining individual hypersensitivity to a pharmaceutical

agent

from gene expression profile)

RN 50-02-2 HCAPLUS

Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, CN $(11\beta, 16\alpha)$ – (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-23-7 HCAPLUS

Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-24-8 HCAPLUS

Pregna-1, 4-diene-3, 20-dione, 11, 17, 21-trihydroxy-, (11β) - (9CI)(CA CN INDEX NAME)

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-06-5 HCAPLUS

CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-33-8 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 6-fluoro-11, 17, 21-trihydroxy-16-methyl-, $(6\alpha, 11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

RN 83-43-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-6-methyl-, $(6\alpha,11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124-94-7 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,16,17,21-tetrahydroxy-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 378-44-9 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, (11β, 16β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 2152-44-5 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,21-dihydroxy-16-methyl-17-[(1-oxopentyl)oxy]-, (11 β ,16 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 3385-03-3 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 6-fluoro-11, 21-dihydroxy-16, 17-[(1-methylethylidene)bis(oxy)]-, (6α, 11β, 16α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 4419-39-0 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-chloro-11,17,21-trihydroxy-16-methyl-, $(11\beta,16\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 51333-22-3 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 16, 17-[butylidenebis(oxy)]-11, 21-dihydroxy-, $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 80474-14-2 HCAPLUS

CN Androsta-1, 4-diene-17-carbothioic acid, 6,9-difluoro-11-hydroxy-16-methyl-3-oxo-17-(1-oxopropoxy)-, S-(fluoromethyl) ester, $(6\alpha,11\beta,16\alpha,17\alpha)$ - (9CI) (CA INDEX NAME)

RN 90566-53-3 HCAPLUS

CN Androsta-1, 4-diene-17-carbothioic acid, 6, 9-difluoro-11, 17-dihydroxy-16-methyl-3-oxo-, S-(fluoromethyl) ester, $(6\alpha, 11\beta, 16\alpha, 17.alp$ ha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 105102-22-5 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9,21-dichloro-11,17-dihydroxy-16-methyl-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

ANSWER 37 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46 2001:113271 HCAPLUS AN 135:628 DN Entered STN: 15 Feb 2001 ED Binding of estrogen and progesterone-BSA conjugates to ΤI glyceraldehyde-3-phosphate dehydrogenase (GAPDH) and the effects of the free steroids on GAPDH enzyme activity: physiological implications Joe, I.; Ramirez, V. D. ΑU CS Department of Molecular and Integrative Physiology, University of Illinois at Urbana-Champaign, Urbana, IL, 61801, USA Steroids (2001), 66(6), 529-538 SO CODEN: STEDAM; ISSN: 0039-128X PB Elsevier Science Inc. DTJournal English LACC 2-4 (Mammalian Hormones) Section cross-reference(s): 7 AB In this study rat brain solubilized plasmalemma-microsomal fractions (B-P3) or cytosolic fractions were applied to P-3-BSA (progesterone linked to BSA at C-3 position) and E-6-BSA (17 β -estradiol linked to BSA at C-6 position) affinity columns. It is interesting that a 37-kDa protein was retained by both columns which was identified as glyceraldehyde-3-phosphate dehydrogenase (GAPDH) by N-terminal sequencing. The 37 kDa protein (GAPDH) was not retained by either a control BSA conjugated affinity column or a corticosterone-BSA affinity column. E-6-BSA bound to GAPDH with higher binding affinity than P-3-BSA or T-3-BSA (testosterone linked to BSA at C-3 position) affinity columns. In addition, the binding of $17\beta-E-6-BSA$ to GAPDH was impeded by free estrogen (17 β -estradiol) completely. Binding studies of E-6-BSA and P-3-BSA to com. GAPDH from rabbit skeletal muscle using radiolabeled ligand binding assays revealed that P-3-BSA had 10+ lower GAPDH binding affinity than E-6-BSA. Next, the effects of estrogen and progesterone on GAPDH activity were studied. Rapid and significant increases in Vmax and changes in Km were observed by the addition of 10 nM estradiol, whereas 100 nM progesterone decreased only Vmax significantly. Testosterone, corticosterone, 17α -estradiol, and diethylstilbestrol did not affect the enzyme activity. The results indicate that GAPDH is a target site for 17β -estradiol and progesterone and suggest possible roles in the regulation of cellular metabolism and synaptic remodeling in which GAPDH has been reported to be involved. ST estrogen progesterone BSA conjugate GAPDH 50-28-2D, 17β-Estradiol, conjugate 57-83 Progesterone, conjugate, biological studies 57-83-0D, RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (binding of estrogen and progesterone-BSA conjugates to glyceraldehyde-3-phosphate dehydrogenase and effects of free steroids on GAPDH enzyme activity in relation to physiol. implications) 56-53-1, 50-22-6D, Corticosterone, conjugate 57-91-0, 17α -Estradiol 58-22-0D, Diethylstilbestrol Testosterone, conjugate RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (binding of estrogen and progesterone-BSA conjugates to glyceraldehyde-3-phosphate dehydrogenase and effects of free steroids on GAPDH enzyme activity in relation to physiol. implications) 9001-50-7P, Glyceraldehyde 3-phosphate dehydrogenase IT

RL: BPR (Biological process); BSU (Biological study, unclassified); PUR

Cordero-Garcia PCT/US03/26233

```
(Purification or recovery); BIOL (Biological study); PREP (Preparation);
      PROC (Process)
         (binding of estrogen and progesterone-BSA conjugates to
         glyceraldehyde-3-phosphate dehydrogenase and effects of free steroids
         on GAPDH enzyme activity in relation to physiol. implications)
                THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
         36
RE
(1) Aronica, S; Proc Natl Acad Sci USA 1994, V91, P8517 HCAPLUS
(2) Berg, B; Biochem Biophys Acta 1977, V479, P152 HCAPLUS

(3) Bradford, M; Anal Biochem 1976, V72, P248 HCAPLUS
(4) Bukusoglu, C; J Neurochem 1994, V63, P1434 HCAPLUS
(5) Cabral, R; Gen Pharmacol 1994, V25, P171

(6) Cardon, J; J Biol Chem 1982, V257, P7615 HCAPLUS
(7) Chung, S; Exp Brain Res 1988, V69, P522 HCAPLUS (8) Dural, D; Biochem Biophys Acta 1983, V737, P409
(9) Gorski, J; Biol Reprod 1993, V48, P8 HCAPLUS
(10) Gronemeyer, H; Annu Rev Genet 1991, V25, P89 HCAPLUS
(11) Hayashi, T; Biochem Biophys Res Commun 1994, V203, P1013 HCAPLUS
(12) Kant, J; J Biol Chem 1973, V248, P8457 HCAPLUS
(13) Ke, F; J Neurochem 1990, V54, P467 HCAPLUS
(14) Kumagai, H; J Biochem 1983, V93, P1259 HCAPLUS
(15) Matsuda, S; Proc Natl Acad Sci USA 1993, V90, P10803 HCAPLUS
(16) McEwen, B; Neurosteroids, a new regulatory function in the nerve system
    1999, P233
(17) Medosch, C; Exp Neurol 1982, V75, P120 MEDLINE
(18) Meyer, C; Eur J Biochem 1996, V239, P726 HCAPLUS
(19) Moats, R; Biol Reprod 1998, V58, P531 HCAPLUS
(20) Modun, B; Infect Immun 1999, V67, P1086 HCAPLUS
(21) Muronetz, V; Arch Biochem Biophys 1994, V313, P253 HCAPLUS
(22) Pierce, G; J Biol Chem 1985, V260, P6862 HCAPLUS
(23) Pietras, R; Nature 1977, V265, P69 HCAPLUS
(24) Sadler, S; J Biol Chem 1982, V257, P355 HCAPLUS (25) Singer, C; J Neurosci 1999, V19, P2455 HCAPLUS
(26) Stallcup, W; J Mol Biol 1973, V80, P77 HCAPLUS
(27) Steck, T; Methods Enzymol 1974, V31, P172 MEDLINE (28) Sylvia, V; J Cell Physiol 1998, V176, P435 HCAPLUS
(29) Tesarik, J; FEBS 1992, V308, P116 HCAPLUS
(30) Tischkau, S; Proc Natl Acad Sci USA 1993, V90, P1285 HCAPLUS
(31) Tomkins, G; Ann Rev Biochem 1963, V32, P677 HCAPLUS
(32) Volker, K; Comp Biochem Physiol 1995, V112B, P503 HCAPLUS
(33) Volker, K; J Mol Recog 1993, V6, P167 HCAPLUS
(34) Wasserman, W; Proc Natl Acad Sci USA 1980, V77, P1534 HCAPLUS
(35) Zheng, J; Eur J Pharmacol 1999, V368, P95 HCAPLUS (36) Zheng, J; J Steroid Biochem Mol Biol 1999, V68, P65 HCAPLUS
     50-22-6D, Corticosterone, conjugate
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
         (binding of estrogen and progesterone-BSA conjugates to
         glyceraldehyde-3-phosphate dehydrogenase and effects of free steroids
         on GAPDH enzyme activity in relation to physiol. implications)
RN
     50-22-6 HCAPLUS
     Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11\beta)- (9CI) (CA INDEX
CN
     NAME)
```

L46 ANSWER 38 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:49967 HCAPLUS

DN 135:185339

ED Entered STN: 19 Jan 2001

TI Immune response to 17β -estradiol involved in polymer gels: Antigen specificity and affinity of hybridoma clones

AU Basalp, Aynur; Mustafaeva, Zeynep; Mustafaev, Mamed; Bermek, Engin

CS Tubitak-Marmara Research Center, Research Institute for Genetic Engineering and Biotechnology, Kocaeli, 41470, Turk.

SO Hybridoma (2000), 19(6), 495-499 CODEN: HYBRDY; ISSN: 0272-457X

PB Mary Ann Liebert, Inc.

DT Journal

LA English

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 2

The immunogenic properties of $17\beta\text{-estradiol}$, immobilized in neg. AΒ charged polymer gels, were investigated, and the specificity of antibodies produced was analyzed. The polymer gels developed were composed of a hydrophobic estradiol core surrounded by hydrophilic polyanions as corona. As an immunogen, it was conceived to function via a dual mode, that is as a hapten-delivery system (prolongation effect) and as a polyelectrolyte adjuvant. Polymer gels containing estradiol appeared to possess a high estradiol-specific immunogenicity even without the addition of traditional adjuvants. A comparative study of estradiol trapped in polymer gels vs. estradiol conjugated to bovine serum albumin (BSA.E) + Incomplete Freund's Adjuvant (IFA) mixts. revealed similar immunogenic properties in terms of induction of specific antibodies. Following a short immunization procedure based on the use of 17β -estradiol immobilized in polymer gels, the authors developed 10 specific monoclonal antibodies with Kd values ranging between 1.2 + 10-7 and 8 + 10-8 M.

ST estradiol polymer gel drug delivery system immunity monoclonal antibody

IT Drug delivery_systems

(gels; immune response to 17β -estradiol involved in polymer gels in relation to antigen specificity and affinity of hybridoma clones) Hybridoma

Immunity

TT

(immune response to 17β -estradiol involved in polymer gels in relation to antigen specificity and affinity of hybridoma clones)

IT Albumins, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study) (immune response to 17β -estradiol involved in polymer gels in relation to antigen specificity and affinity of hybridoma clones)

```
IT '
     Haptens
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
         (immune response to 17\beta-estradiol involved in polymer gels in
         relation to antigen specificity and affinity of hybridoma clones)
ΙT
     Antibodies
     RL: BPR (Biological process); BSU (Biological study, unclassified); MFM
     (Metabolic formation); BIOL (Biological study); FORM (Formation,
     nonpreparative); PROC (Process)
         (monoclonal; immune response to 17\beta-estradiol involved in polymer
         gels in relation to antigen specificity and affinity of hybridoma
         clones)
IT
     50-22-6, Corticosterone
                                  52-39-1, Aldosterone
                                                            57-83-0,
     Progesterone, biological studies
                                           58-22-0, Testosterone
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
         (immune response to 17\beta-estradiol involved in polymer gels in
         relation to antigen specificity and affinity of hybridoma clones)
     50-28-2, 17\beta-Estradiol, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
     (Uses)
         (immune response to 17\beta-estradiol involved in polymer gels in
         relation to antigen specificity and affinity of hybridoma clones)
IT
     355145-90-3P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
         (immune response to 17\beta-estradiol involved in polymer gels in
         relation to antigen specificity and affinity of hybridoma clones)
TΤ
     9003-01-4, Polyacrylic acid
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (immune response to 17\beta-estradiol involved in polymer gels in
        relation to antigen specificity and affinity of hybridoma clones)
RE.CNT 42
               THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Allcock, H; Macromolecules 1980, V13, P1345
(2) Anon; US 4952569 1996 HCAPLUS
(3) Basalp, A; Hybridoma 1996, V15, P233 HCAPLUS
(4) Brannon-Peppas, L; J Biomater Sci Polymer 1994, V5, P339 HCAPLUS

(5) Buntner, B; J Controlled Release 1998, V56, P159 HCAPLUS
(6) Casanas-Roux, F; Hum Reprod 1996, V11, P357 HCAPLUS
(7) Dean, P; Steroid Lipid Res 1972, V3, P82 HCAPLUS

(8) Doulliard, J; Methods Enzymol 1983, V92, P168
(9) Elsaesser, F; Steroids 1989, V54, P159 HCAPLUS
(10) Erlanger, B; J Biol Chem 1957, V228, P713 HCAPLUS
(11) Fantl, V; J Endokrinol 1984, V100, P367 HCAPLUS (12) Fantl, V; J Steroid Biochem 1981, V14, P405 HCAPLUS (13) Fantl, V; J Steroid Biochem 1982, V17, P125 HCAPLUS
(14) Galfre, G; Methods Enzymol 1983, V73, P3
(15) Harlow, E; Antibodies: A Laboratory Manual 1988
(16) Irion, G; Pharm Res 1995, V12, P1618 HCAPLUS
(17) Lei, Y; Yao Hsueh Hsueh Pao 1993, V28, P269
(18) Lietzke, R; J Immunol Methods 1985, V76, P223 MEDLINE
(19) Miller, M; Encyclopedia of Polymer Science and Technology 1978, V1, P445
(20) Musatfaev, M; Immunology USSR 1990, V6, P48
(21) Musatfaev, M; Mol Biol USSR 1990, V24, P358
(22) Musatfaev, M; The Polymeric Materials Encyclopedia. Synthesis, Properties
```

and Applications 1996, P5771

(23) Mustafaev, M; Biomed Sci 1990, V1, P274 HCAPLUS

Cordero-Garcia PCT/US03/26233

- (24) Mustafaev, M; Immunol Lett 1996, V52, P63 HCAPLUS
- (25) Mustafaev, M; J Bioact Compet Polym 1998, V10, P33
- (26) Mustafaev, M; J Immunol Methods 1996, V197, P31 HCAPLUS
- (27) Mustafaev, M; Polym Gels Netw 1996, V4, P363 HCAPLUS
- (28) Mustafaev, M; Recent Advances in Peptide and Protein and Protein Delivery 1998, P145
- (29) Nowak, M; Acta Pharm Hung 1996, V66, P153 HCAPLUS
- (30) Ottenbrite, R; Polymeric Drugs 1978, P262
- (31) Petrov, R; Sov Med Rev D Immunol 1992, P1
- (32) Pinazzi, C; Bull Socie'te' Chimique de France 1974, V3, P667 (33) Pinazzi, C; Eur Polymer J 1977, V14, P205 (34) Plerdeau, A; Eur Polymer J 1980, V17, P801 (35) Plotka, E; J Wildl Dis 1988, V24, P507 HCAPLUS (36) Rao, P; Steroids 1998, V63, P141 HCAPLUS

- (37) Ritter, H; Makromol Chem Rapid Commun 1982, V3, P431 HCAPLUS
- (38) Robaire, B; 1987 Biol Reprod 1996, V37, P327 (39) Sitruk-Ware, R; J Ster Biochem Mol Biol 1995, V53, P247 HCAPLUS
- (40) Ye, W; Pharm Dev Technol 1996, V1, P1 HCAPLUS (41) Yolles, S; J Polymer Sci Polymer Chem Ed 1979, V17, P4111 HCAPLUS
- (42) Zupon, M; J Pharm Sci 1983, V72, P1323 HCAPLUS
- IT

50-22-6, Corticosterone RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(immune response to 17β -estradiol involved in polymer gels in relation to antigen specificity and affinity of hybridoma clones)

- RN 50-22-6 HCAPLUS
- Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11β) (9CI) (CA INDEX CN NAME)

- L46 ANSWER 39 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- ΑN 2000:845616 HCAPLUS
- DN 134:212554
- ED Entered STN: 05 Dec 2000
- Dextran-methylprednisolone succinate as a prodrug of methylprednisolone: TIin vitro immunosuppressive effects on rat blood and spleen lymphocytes
- ΑU Rensberger, Katherine L.; Hoganson, Dean A.; Mehvar, Reza
- Department of Biology, Drake University, Des Moines, IA, 50311, USA CS
- International Journal of Pharmaceutics (2000), 207(1-2), 71-76 SO CODEN: IJPHDE; ISSN: 0378-5173
- PB Elsevier Science B.V.
- DTJournal
- LAEnglish
- 63-5 (Pharmaceuticals) CC

```
Section cross-reference(s): 1, 15, 32, 33
     The in vitro immunosuppressive activity of a conjugate of
AΒ
     methylprednisolone (MP) with dextran 70 kDa (DEX-MPS) was tested
     using the lymphocyte proliferation assay after stimulation of lymphocytes
     with Con A. Blood and spleen lymphocytes, isolated from drug-free male
     Sprague-Dawley rats, were used in the assay. First, the optimum concentration
\alpha f
     Con-A for stimulation of lymphocytes was determined The inhibition of the
     lymphocyte proliferation was then tested in the presence of 0.25, 0.5,
     1.0, 2.5, 5.0, 10, 20, and 50 nM concns. (MP equivalent) of DEX-MPS or free
     MP. The maximum stimulation of lymphocytes with Con-A was observed at mitogen
     concns. of 2.5 and 10 \mug/mL for the spleen and blood lymphocytes, resp.
     For free MP, sigmoidal relationships were observed between the effect (%
     inhibition of lymphocyte proliferation) and the logarithm of MP concentration
     Addnl., the maximum inhibitory effect (Imax) and MP concentration producing
half of
     Imax (IC50) were, resp., 98% and 1.38 nM for the blood and 86% and 3.1 nM
     for the spleen lymphocytes. For MP conjugated to dextran, the
     response-log concentration curves were substantially shifted to the right with .
     IC50 values of 40 and 52 nM for the blood and spleen lymphocytes, resp.
     It is concluded that compared with free MP, the steroid attached to
     dextran has minimal immunosuppressive activity. Therefore, to be
     effective in vivo, DEX-MPS should release MP in the body.
ST
     methylprednisolone succinate dextran prodrug immunosuppressant
IΤ
     Cell proliferation
     Drug bioavailability
     Immunosuppressants
     Lymphocyte
        (in vitro immunosuppressive effects on rat blood and spleen lymphocytes
        of dextran-methylprednisolone succinate as a prodrug)
IT
     Drug delivery systems
        (prodrugs; in vitro immunosuppressive effects on rat blood and spleen
        lymphocytes of dextran-methylprednisolone succinate as a prodrug)
IT
     83-43-2, 6\alpha-Methylprednisolone
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); FMU (Formation, unclassified); RCT (Reactant); THU
     (Therapeutic use); BIOL (Biological study); FORM (Formation,
     nonpreparative); RACT (Reactant or reagent); USES (Uses)
        (in vitro immunosuppressive effects on rat blood and spleen lymphocytes
        of dextran-methylprednisolone succinate as a prodrug)
IT
     128003-82-7P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (in vitro immunosuppressive effects on rat blood and spleen lymphocytes
        of dextran-methylprednisolone succinate as a prodrug)
     9004-54-0, Dextran, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
TT
        (in vitro immunosuppressive effects on rat blood and spleen lymphocytes
        of dextran-methylprednisolone succinate as a prodrug)
ΙT
     2921-57-5, Methylprednisolone succinate
     RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT
     (Reactant or reagent); USES (Uses)
        (in vitro immunosuppressive effects on rat blood and spleen lymphocytes
        of dextran-methylprednisolone succinate as a prodrug)
```

- RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD RE
- (1) Boitard, C; Adv Nephrol Necker Hosp 1989, V18, P335 MEDLINE (2) Erken, U; Transplant Proc 1993, V25, P2253 MEDLINE

- (3) Freshney, R; Culture of Animal Cells 2nd ed 1987
- (4) Kojima, T; J Pharm Pharmacol 1980, V32, P30 HCAPLUS
- (5) McLeod, A; Int J Pharmaceut 1993, V92, P105 HCAPLUS
- (6) Mehvar, R; J Control Release 2000, V68, P53 HCAPLUS(7) Mehvar, R; J Pharm Sci 1994, V83, P1495 HCAPLUS
- (8) Mehvar, R; J Pharmaceut Biomed Anal 1999, V19, P785 HCAPLUS
- (9) Mehvar, R; Pharm Res 1997, V14, PS336
- (10) Mishina, E; J Pharmacol Exp Ther 1994, V271, P868 HCAPLUS (11) Mishina, E; Pharm Res 1993, V10, P1402 HCAPLUS (12) Mishina, E; Pharm Res 1994, V11, P848 HCAPLUS

- (13) Sakamoto, Y; Biochim Biophys Acta 1977, V498, P102 HCAPLUS
- (14) Stubbs, S; Transplant Proc 1973, V5, P1145 MEDLINE
- (15) Wiesner, R; Transplantation 1994, V58, P1053 MEDLINE
- (16) Yaqoob, P; Immunology 1994, V82, P603 HCAPLUS
- (17) Yura, H; Control Release 1999, V57, P87 HCAPLUS
- 83-43-2, 6α -Methylprednisolone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FMU (Formation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); FORM (Formation, nonpreparative); RACT (Reactant or reagent); USES (Uses)

(in vitro immunosuppressive effects on rat blood and spleen lymphocytes of dextran-methylprednisolone succinate as a prodrug)

RN83-43-2 HCAPLUS

Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-6-methyl-, CN $(6\alpha, 11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 128003-82-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(in vitro immunosuppressive effects on rat blood and spleen lymphocytes of dextran-methylprednisolone succinate as a prodrug)

128003-82-7 HCAPLUS RN

CN Dextran, $(6\alpha, 11\beta)-11, 17-dihydroxy-6-methyl-3, 20-dioxopregna-1, 4$ dien-21-yl butanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-54-0 Unspecified CMF

۲.

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2921-57-5 CMF C26 H34 O8

Absolute stereochemistry.

IT 2921-57-5, Methylprednisolone succinate

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)

(in vitro immunosuppressive effects on rat blood and spleen lymphocytes of dextran-methylprednisolone succinate as a prodrug)

RN 2921-57-5 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 21-(3-carboxy-1-oxopropoxy)-11, 17-dihydroxy-6-methyl-, $(6\alpha, 11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 40 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1999:769251 HCAPLUS

DN 132:59422

ED Entered STN: 06 Dec 1999

- TI Regulation of components of the ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone
- AU Chrysis, Dionisios; Underwood, Louis E.
- CS Department of Pediatrics, University of North Carolina, Chapel Hill, NC, 27599-7220, USA
- SO Endocrinology (1999), 140(12), 5635-5641 CODEN: ENDOAO; ISSN: 0013-7227
- PB Endocrine Society
- DT Journal
- LA English
- CC 2-5 (Mammalian Hormones)
- AB To investigate whether the anabolic effects of insulin-like growth factor I (IGF-I) and GH are mediated through regulation of the ubiquitin (Ub) pathway, the authors examined the effect of IGF-I (0.35 µg/100 g) and/or GH (0.3 mg/100 g BW) on the expression of Ub and Ub-conjugating (E2) enzyme mRNAs in skeletal muscle of rats made catabolic by treatment with dexamethasone (Dex; 0.5 mg/100 g BW) for 3 days. Dex caused a significant loss of body and gastrocnemius weight (14% and 25%, resp.) concurrent with an increase in the 2.8- and 1.2-kb transcripts of Ub (14.3- and 12-fold increases, resp.), the 1.8- and 1.2-kb transcripts of 14-kDa Ub-conjugating enzyme (E2-14 kDa; 5.6- and 7.7-fold increases, resp.), the 4.4- and 2.4-kb transcripts of Ub-E2G (6.5- and 8.2-fold increases, resp.), and the 2E isoform of the 17kDa E2 mRNA (3.5-fold increase). Injections of IGF-I in Dex-treated animals ameliorated the body weight loss, and the gastrocnemius tended to be heavier. This improvement was also accompanied by a significant suppression of transcripts for Ub (58% and 66% decreases), E2-14 kDa (58% and 68% decreases), and Ub-E2G (78% decrease), whereas the 2E isoform of the 17-kDa E2 was only modestly affected (20% decrease). GH restored serum IGF-I levels to normal in Dex-treated rats, but had no effect on the body weight loss or on any of the studied components of the Ub pathway. Administration of IGF-I to the Dex/GH-treated animals decreased the activated mRNAs of the Ub pathway in a manner and degree similar to those observed in the Dex/IGF-I group. In summary, these results provide evidence that IGF-I regulates the expression of mRNAs encoding components of the Ub pathway during catabolism and suggest a possible mechanism for the antiproteolytic actions of IGF-I. GH, which is believed not to affect proteolysis but only protein synthesis, had no effect on any of the mRNAs studied.
- ST IGF growth hormone ubiquitin muscle glucocorticoid
- IT Body weight

Muscle

Protein degradation

(regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone)

IT Glucocorticoids.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone)

IT Enzymes, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(ubiquitin-conjugating, isoenzymes; regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone

```
CA 2212744
                         AA
                                19960926
                                            CA 1996-2212744
                                                                  19960318
     AU 9653148
                         A1
                                19961008
                                           AU 1996-53148
                                                                   19960318
     EP 817617
                         A1
                                19980114
                                           EP 1996-909753
                                                                  19960318
     EP 817617
                                20030514
                         В1
        R: DE, FR, GB, IT
     JP 11502817
                         Т2
                               19990309
                                         JP 1996-528543
                                                           19960318
PRAI US 1995-408052
                                19950321
                         Α
     WO 1996-US3666
                        W
                               19960318
CLASS
                CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                ____
 WO 9629059
                ICM
                       A61K009-16
                ICS
                       A61K009-50
 US 5686113 ECLA A61K009/16H6F; A61K009/16K; A61K009/50H6F; A61K009/50K
    An aqueous core microcapsule has a capsular wall provided with a peptide(s) of
     pre-determined binding specificity(ies) appended to the surface, the wall being
     the reaction product of an anionic polymer or salt thereof and a
     polyamine, salt thereof, mixts. thereof, or mixts. thereof with
     monoamines. The aqueous core may contain an active ingredient(s), and be
     targeted for delivery to specific cell tissues. The microcapsules are
     provided as a composition and in a kit with instructions for use in imaging,
     diagnosis, therapy, vaccination, and other applications.
     Spermine/alginate microcapsules were prepared by addition of nominally 8
     + 10-7 \muL droplets of a 0.05% (weight/volume) aqueous Na alginate solution to
     a 0.05% (weight/volume) aqueous spermine-HCl solution at room temperature The
resulting
     suspension of microcapsules was stirred to allow equilibration and then
     allowed to settle, the supernatant was removed, and microcapsules washed
     and stored at refrigerator temperature
ST
     peptide polymer amine microcapsule drug targeting
IT
     Immunomodulators
        (-secreting cells, encapsulation of; polymeric microcapsules of
        predetd. peptide specificity for drug targeting in diagnosis and
        therapy)
ΙT
     Nucleotides, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (antisense; polymeric microcapsules of predetd. peptide specificity for
        drug targeting in diagnosis and therapy)
IT
     Adrenal cortex
     Parathyroid gland
     Reproductive organ
     Thyroid gland
        (cells, encapsulation of; polymeric microcapsules of predetd. peptide
        specificity for drug targeting in diagnosis and therapy)
IT
     Antigens
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (complementary; polymeric microcapsules of predetd. peptide specificity
        for drug targeting in diagnosis and therapy)
IT
     Pancreatic islet of Langerhans
        (encapsulation of; polymeric microcapsules of predetd. peptide
        specificity for drug targeting in diagnosis and therapy)
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (fragments; polymeric microcapsules of predetd. peptide specificity for
        drug targeting in diagnosis and therapy)
IT
     Bacillus thuringiensis
        (larvicidal proteins of; polymeric microcapsules of predetd. peptide
        specificity for drug targeting in diagnosis and therapy)
```

Cordero-Garcia

PCT/US03/26233

```
ΙT
     Bean
     Canavalia ensiformis
     Erythrina corallodendron
     Lentil
     Peanut
     Soybean
     Tomato
     Ulex europaeus
     Vicia villosa
     Wheat
        (lectins of; polymeric microcapsules of predetd. peptide specificity
        for drug targeting in diagnosis and therapy)
ΙT
     Agrochemicals
     Anthelmintics
     Antibiotics
     Diagnosis
     Dyes
     Encapsulation
     Fungicides and Fungistats
     Imaging
     Inflammation inhibitors
     Labels
     Magnetic substances
     Neoplasm inhibitors
     Particle size
     Pesticides
     Photoprotectants
     Protozoacides
        (polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
IT
     Agglutinins and Lectins
     Avidins
     Ferritins
     Hemoglobins
    Peptides, biological studies
     Pheromones
     Phosphazene polymers
     Radioelements, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
TT
     Hypoglycemia
        (treatment of, agents for; polymeric microcapsules of predetd. peptide
        specificity for drug targeting in diagnosis and therapy)
ΙT
     Immunoglobulins
     Proteins, specific or class
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (A, polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
IT
     Immunoglobulins
     Proteins, specific or class
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (G, polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
TΤ
     Immunoglobulins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (M, polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
```

```
ΙT
     Polyelectrolytes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anionic, polymeric microcapsules of predetd. peptide specificity for
        drug targeting in diagnosis and therapy)
ΙT
     Polyelectrolytes
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (anionic, salts; polymeric microcapsules of predetd. peptide
        specificity for drug targeting in diagnosis and therapy)
ΙT
     Amines, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (di-, polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
ΙT
        (hepatocyte, encapsulation of; polymeric microcapsules of predetd.
        peptide specificity for drug targeting in diagnosis and therapy)
ΙT
     Lymphokines and Cytokines
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (interleukins, polymeric microcapsules of predetd. peptide specificity
        for drug targeting in diagnosis and therapy)
ΙT
     Pharmaceutical dosage forms
        (microcapsules, polymeric microcapsules of predetd. peptide specificity
        for drug targeting in diagnosis and therapy)
     Amines, biological studies
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (mono-, polymeric microcapsules of predetd. peptide specificity for
        drug targeting in diagnosis and therapy)
     Amines, biological studies
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (poly-, polymeric microcapsules of predetd. peptide specificity for
        drug targeting in diagnosis and therapy)
     Amines, biological studies
ΙT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (poly-, salts, polymeric microcapsules of predetd. peptide specificity
        for drug targeting in diagnosis and therapy)
IT
     Amines, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (tetra-, polymeric microcapsules of predetd. peptide specificity for
        drug targeting in diagnosis and therapy)
     Amines, biological studies
IT
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (tri-, polymeric microcapsules of predetd. peptide specificity for drug
        targeting in diagnosis and therapy)
ΙT
     38317-21-4, Acrylic acid-ethylene glycol copolymer
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (crosslinked; polymeric microcapsules of predetd. peptide specificity
        for drug targeting in diagnosis and therapy)
                             51-21-8, Fluorouracil
IT
     50-24-8, Prednisolone
                                                     53-86-1,
                    54-05-7, Chloroquine
                                           58-55-9, Theophylline, biological
     Indomethacin
                                 58-85-5D, Biotin, conjugates
               58-85-5, Biotin
                            61-73-4, Methylene blue 778-90-0, 1,2-Propanediamine
     60-54-8, Tetracycline
                                                       71-44-3, Spermine
     72-57-1, Trypan blue
                                                           90-89-1,
                                                 107-15-3, 1,2-Ethanediamine,
                          98-92-0, Nicotinamide
     Diethylcarbamazine
                          110-60-1, 1,4-Butanediamine
     biological studies
                                                        110-85-0, Piperazine,
                                    124-20-9, Spermidine
                          111-40-0
     biological studies
                                                             124-22-1,
                                                 126-07-8, Griseofulvin
                    124-30-1, 1-Octadecanamine
     Dodecylamine
                        143-27-1, Hexadecylamine 143-74-8, Phenol red
     130-95-0, Quinine
     462-94-2, 1,5-Pentanediamine 1120-49-6, Didecylamine
                                                               1271-42-7,
     Ferrocene carboxylic acid 1397-89-3, Amphotericin B
                                                              1634-82-8,
```

2-(4'-Hydroxybenzene)azobenzoic acid 1892-57-5 2016-42-4,

2016-57-1, 1-Decanamine 2321-07-5 4697-36-3, 1-Tetradecanamine Carbenicillin 7440-57-5D, Gold, conjugates 9000-07-1, Carrageenan 9001-12-1, Collagenase 9001-40-5, Glucose 6-phosphate 9002-01-1, Streptokinase 9002-07-7, 9003-01-4, Polyacrylic acid dehydrogenase 9001-62-1, Lipase Trypsin 9002-72-6, Somatotropin 9003-20-7, Polyvinyl acetate 9004-10-8, Insulin, biological studies 9004-32-4 9004-38-0, Cellulose acetate phthalate 9004-61-9, Hyaluronic acid 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9005-49-6, Heparin, biological studies 9007-12-9, Calcitonin 9007-28-7, Chondroitin sulfate 9012-54-8, Cellulase 9014-00-0, Luciferase Streptavidin 9015-68-3, Asparaginase 9031-11-2, Lactase 9032-43-3, Cellulose sulfate 9050-31-1, Hydroxypropyl methyl cellulose phthalate 11028-71-0, Concanavalin A 11096-26-7, Erythropoietin 13558-31-1D, derivs. 16423-68-0, Erythrosin 17372-87-1, Eosin 22204-53-1, Naproxen 22799-81-1 23214-92-8, Doxorubicin 25962-31-6, 3H-Acetic anhydride 27072-45-3, Fluorescein 31566-31-1, Glyceryl monostearate isothiocyanate 32609-14-6, Arabic 36877-69-7, Rhodamine isothiocyanate 37340-82-2, Streptodornase acid 55268-74-1, Praziquantel 55137-74-1, 14C-Acetic anhydride 60520-47-0, 65277-42-1, Ketoconazole Eosin isothiocyanate 69468-17-3, 70288-86-7, Ivermectin 82354-19-6, Texas red Diaminobutane 82436-78-0, N-Hydroxysulfosuccinimide 87915-38-6, Dextran blue 183452-12-2 139639-23-9, Tissue plasminogen activator RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polymeric microcapsules of predetd. peptide specificity for drug targeting in diagnosis and therapy)

IT 50-24-8, Prednisolone 9004-61-9, Hyaluronic acid

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (polymeric microcapsules of predetd. peptide specificity for drug targeting in diagnosis and therapy)

RN 50-24-8 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 9004-61-9 HCAPLUS

CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L46 ANSWER 46 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:612107 HCAPLUS

DN 125:293399

ED Entered STN: 14 Oct 1996

- TI Dexamethasone suppresses mucus production and MUC-2 and MUC-5AC gene expression by NCI-H292 cells
- AU Kai, Hirofumi; Yoshitake, Kazuhisa; Hisatsune, Akinori; Kido, Tomoyuki; Isohama, Yoichiro; Takahama, Kazuo; Miyata, Takeshi
- CS Faculty of Pharmaceutical Sciences, Kumamoto University, Kumamoto, 862, Japan
- SO American Journal of Physiology (1996), 271(3, Pt. 1), L484-L488 CODEN: AJPHAP; ISSN: 0002-9513
- PB American Physiological Society
- DT Journal
- LA English
- CC 2-4 (Mammalian Hormones)
- AB Excessive production of airway mucus is a characteristic feature of many chronic inflammatory lung diseases. Although current pharmacol. approaches to excessive mucus production are limited, glucocorticoids appear to the most effective among a few useful drugs. The exact evidence for the effectiveness of glucocorticoids on mucus production has not been fully elucidated to date. The purpose of this study is to clarify the effect of dexamethasone on mucus production and mucin gene expression in a human pulmonary mucoepidermoid carcinoma cell line (NCI-H292). NCI-H292 cells produced hyaluronidase-resistant high-mol.-weight glycoconjugates (HMWG), which elute in the void volume on Sepharose CL-4B column chromatog. Dexamethasone significantly suppressed the basal production of [3H]glucosamine- or [3H]serine-labeled HMWG in NCI-H292 cells. Northern blot anal., dexamethasone attenuated steady-state mRNA levels of MUC-2 and MUC-5AC mucin genes. These data indicate that dexamethasone suppresses the basal production of HMWG and decreases steady-state mRNA levels of mucin genes in airway mucus-producing cancer cells.
- ST dexamethasone mucus mucin gene respiratory tract
- IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(MUC-2; dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT Gene, animal

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(MUC-5AC; dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT Bronchi

Mucus

Respiratory tract

(dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT Mucins

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT Carbohydrates and Sugars, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(conjugates, high-mol.-weight; dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT Corticosteroids, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(gluco-, dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT 50-02-2, Dexamethasone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

IT 50-02-2, Dexamethasone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dexamethasone suppression of mucus production and mucin gene expression by pulmonary mucoepidermoid carcinoma cells)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 47 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:357130 HCAPLUS

DN 125:26253

ED Entered STN: 20 Jun 1996

TI Compositions and methods for the abrogation of cellular proliferation utilizing the human immunodeficiency virus vpr protein

IN Weiner, David B.; Levy, David N.; Refaeli, Yosef; Williams, William V.;
Ayyaroo, Velpandi

PA University of Pennsylvania, USA; Apollon, Inc.

SO PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM A01N063-00

ICS A61K039-21; A61K048-00; C07H021-04; C12N015-00; C12P021-06

CC 1-6 (Pharmacology)

Section cross-reference(s): 2, 3, 10

FAN.CNT 2

| | PATENT NO. | | | | KIND | | DATE | | | APPLICATION NO. | | | | | | DATE | | |
|----|------------|--------|-----|-----|------|-----|------|------|-----|-----------------|-----|-----|-----|-----|-----|----------|-----|--|
| | | | | | | - | | | | | | | | | | | | |
| ΡI | WO 9608970 | | | | A1 | | 1996 | 0328 | | WO 1995-US12344 | | | | | | 19950921 | | |
| | V | 7: AM, | AT, | ΑU, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, | EE, | ES, | FI, | |
| | | GB, | GE, | HU, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LK, | LR, | LT, | LU, | LV, | MD, | |

```
MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
              TM, TT
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
                                            US 1994-309644
     US 5763190
                                 19980609
                                                                    19940921
                          Α
     AU 9537276
                          A1
                                 19960409
                                            AU 1995-37276
                                                                    19950921
     US 6667157
                          В1
                                 20031223
                                            US 1997-809186
                                                                    19970624
PRAI US 1994-309644
                          Α
                                 19940921
     WO 1995-US12344
                         W
                                 19950921
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                 ____
 WO 9608970
                 ICM
                        A01N063-00
                        A61K039-21; A61K048-00; C07H021-04; C12N015-00;
                 ICS
                        C12P021-06
                 ECLA
                        A61K038/16A; A61K048/00; C07K014/16F
 WO 9608970
                 ECLA
                        A61K038/16A; C07K014/16F
 US 5763190
                        A61K038/16A; C07K014/16F
· US 6667157
                 ECLA
     Methods are disclosed for inhibiting proliferation of cells using vpr
AΒ
     protein or nucleotide sequences that encode vpr. Methods are also
     disclosed for preventing lymphocyte activation using vpr protein or
     nucleotide sequences that encode vpr. Methods are disclosed for treating
     an individual diagnosed with or suspected of suffering from autoimmune
     disease, diseases characterized by proliferating cells, and graft vs. host
     disease, by administering vpr protein or a functional fragment thereof, or
     a nucleic acid mol. that comprises a nucleotide sequence that encodes vpr
     protein or a functional fragment thereof. Conjugated compns.
     for delivery of active agents to the nucleus of cells are disclosed. When
     added to the culture media of rhabdomyosarcoma cells, recombinant vpr
     protein induced growth arrest and cellular differentiation. A 41
     kDa cytosolic protein (rip-1) was identified which co-eluted with
     vpr from a vpr-specific immunoaffinity column. Rip-1 co-translocated with
     vpr into the nucleus either after exposure of cells to HIV-1 virus or to
     exogenous vpr protein. The rip-1-vpr complex assocs. with the activated
     glucocorticosteroid type II receptor complex.
     HIV vpr protein cell proliferation inhibitor; lymphocyte activation
ST
     inhibition vpr protein; autoimmune disease treatment vpr protein; graft
     versus host therapeutic vpr protein
IT
     Pharmaceuticals
         (conjugates, with vpr or vpr rip-1-binding fragment; vpr
        protein of human immunodeficiency virus for inhibition of cell
        proliferation, preventing lymphocyte activation, and treatment of
        diseases)
ΙT
     Antidiabetics and Hypoglycemics
         (for insulin-dependent diabetes mellitus; vpr protein of human
        immunodeficiency virus for inhibition of cell proliferation, preventing
        lymphocyte activation, and treatment of diseases)
ΙT
     Macrophage
         (rip-1 protein detection in rhabdomyosarcoma and other cell types)
     Autoimmune disease
IT
     Cell proliferation
     Dermatomyositis
     Graves' disease
     Lupus erythematosus
     Lymphocyte
     Monocyte
     Multiple sclerosis
     Myasthenia gravis
```

Psoriasis

Sarcoidosis

Signal transduction, biological

Sjogren's syndrome

Transplant and Transplantation

(vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Nucleic acids

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (vpr-encoding; vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Cell nucleus

(vpr-rip-1 translocation to nucleus in relation to vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Proteins, specific or class

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(41,000-mol.-weight, rip-1; vpr-rip-1 association in relation to vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Lymphocyte

(B-cell, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Intestine, disease

(Crohn's, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Genetic element

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(GRE (glucocorticosteroid-responsive element), induction of GRE-DNA binding complex by vpr)

IT Lymphocyte

(T-cell, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Granulomatous disease

(Wegener's granulomatosis, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Spondylitis

(ankylosing, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Inflammation inhibitors

(antiarthritics, for reactive arthritis; vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Bronchodilators

(antiasthmatics, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Inflammation inhibitors

(antirheumatics, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and

treatment of diseases)

IT Anemia (disease)

(autoimmune hemolytic, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Thyroid gland, disease

(autoimmune thyroiditis, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Deoxyribonucleic acids

Nucleic acids

Radioelements, biological studies

Toxins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (conjugates, with vpr or vpr rip-1-binding fragment; vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Blood platelet

(disease, autoimmune thrombocytopenia, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Connective tissue

(disease, scleroderma, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Biliary tract

(disease, sclerosis, primary; vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Proteins, specific or class

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (gene vpr, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Corticosteroid receptors

Receptors

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (glucocorticosteroid, vpr association with rip-1 and glucocorticosteroid

(glucocorticosteroid, vpr association with rip-1 and glucocorticosteroid receptor in relation to vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Virus, animal

(human immunodeficiency, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Genetic element

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(long terminal repeat, vpr protein enhancement of HIV replication in vitro through transactivating activity)

IT Cryoglobulins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (metabolic disorders, cryoglobulinemia, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Hematopoietic precursor cell

(myeloid, rip-1 protein detection in rhabdomyosarcoma and other cell

types)

IT Neuroglia

(neoplasm, astrocytoma, rip-1 protein detection in rhabdomyosarcoma and other cell types)

IT Nerve, neoplasm

(neuroblastoma, rip-1 protein detection in rhabdomyosarcoma and other cell types)

IT Bone, neoplasm

(osteosarcoma, rip-1 protein detection in rhabdomyosarcoma and other cell types)

IT Anemia (disease)

(pernicious, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Muscle, disease

(polymyositis, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Neoplasm inhibitors

(rhabdomyosarcoma, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Myoma

(rhabdomyosarcoma, inhibitors, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Intestine, disease

(ulcerative colitis, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT Blood vessel, disease

(vasculitis, vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT 84371-65-3, Mifepristone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(glucocorticosteroid receptor II inhibitor effect on vpr-mediated effects on rip-1)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(rip-1 translocation to nucleus in relation to vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

IT 50-02-2, Dexamethasone 50-23-7, Hydrocortisone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(rip-1 translocation to nucleus in relation to vpr protein of human immunodeficiency virus for inhibition of cell proliferation, preventing lymphocyte activation, and treatment of diseases)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 48 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1996:51894 HCAPLUS

DN 124:76824

ED Entered STN: 25 Jan 1996

TI Sensitivity and protein turnover response to glucocorticoids are different in skeletal muscle from adult and old rats: lack of regulation of the ubiquitin-proteasome proteolytic pathway in aging

AU Dardevet, Dominique; Sornet, Claire; Taillandier, Daniel; Savary, Isabelle; Attaix, Didier; Grizard, Jean

CS Centre de Recherche en Nutrition Humaine, INRA, Ceyrat, 63122, Fr.

SO Journal of Clinical Investigation (1995), 96(5), 2113-19 CODEN: JCINAO; ISSN: 0021-9738

PB Rockefeller University Press

DT Journal

LA English

CC 2-4 (Mammalian Hormones)

AB The authors studied glucocorticoid-induced muscle wasting and subsequent recovery in adult (7-mo-old) and old (22-mo-old) rats, since the increased incidence of various disease states may result in glucocorticoids hypersecretion in aging. Adult and old rats received dexamethasone in their drinking water and were then allowed to recover. Muscle wasting occurred more rapidly in old rats and the recovery of muscle mass was impaired, suggesting that glucocorticoids may be involved in the emergence of muscle atrophy with advancing age. According to measurements in incubated epitrochlearis muscles, dexamethasone-induced muscle wasting

mainly resulted from increased protein breakdown in the adult, but from depressed protein synthesis in the aged animal. Increased expression of cathepsin D, m-calpain, and ubiquitin was observed in the muscles from both dexamethasone-treated adult and old rats. By contrast, the disappearance of the stimulatory effect of glucocorticoids on protein breakdown in aging occurred along with a loss of ability of steroids to enhance the expression of the 14 kDa ubiquitin carrier protein E2, which is involved in protein substrate ubiquitinylation, and of subunits of the 20 S proteasome (the proteolytic core of the 26 S proteasome that degrades ubiquitin conjugates). Thus, if glucocorticoids play any role in the progressive muscle atrophy seen in aging, this is unlikely to result from an activation of the ubiquitin-proteasome proteolytic pathway. muscle protein turnover glucocorticoid aging; ubiquitin protein muscle glucocorticoid aging; proteasome muscle glucocorticoid aging

IT Muscle

Senescence

Translation, genetic

(aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT Proteins, biological studies

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT Enzymes

RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)

(E2 (ubiquitin-carrier), 14,000-mol.-weight, aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT Corticosteroids, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (gluco-, aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT 50-02-2, Dexamethasone

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT 140879-24-9, Proteasome

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT 9025-26-7, Cathepsin D 60267-61-0, Ubiquitin

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT 78990-62-2, Calpain

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation,

nonpreparative); PROC (Process)

(m-; aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

IT 50-02-2, Dexamethasone

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (aging effect on sensitivity and protein turnover response to glucocorticoids in skeletal muscle from adult and old rats in relation to ubiquitin-proteasome proteolytic pathway)

RN 50-02-2 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 49 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1994:570849 HCAPLUS

DN 121:170849

ED Entered STN: 15 Oct 1994

TI Regulation of phenol sulfotransferase expression in cultured bovine bronchial epithelial cells by hydrocortisone

AU Beckmann, Joe D.; Illig, Mary; Bartzatt, Ronald

CS Departments of Internal Medicine, University of Nebraska Medical Center, Omaha, NE, 68198, USA

SO Journal of Cellular Physiology (1994), 160(3), 603-10 CODEN: JCLLAX; ISSN: 0021-9541

DT Journal

LA English

CC 2-4 (Mammalian Hormones)

Section cross-reference(s): 4

One conjugative pathway for the inactivation of endogenous and AΒ exogenous hydroxylated aromatic compds. is catalyzed by phenol (aryl)sulfotransferases (PSTs), which esterify phenolic acceptors with sulfate. The tracheobronchial epithelium is commonly exposed to phenolic drugs and pollutants, and metabolic sulfation and PST activity in this tissue have been previously demonstrated. To determine what factors may control PST expression, exts. of serum-free, growth factor-supplemented cultures of bovine bronchial epithelial cells were assayed for PST activity and PST antigen. The most significant finding was dose-dependent, apparent stimulated expression by hydrocortisone (EC50 = 4 nM, maximal stimulation at 20 nM). Time-course expts., however, revealed progressive loss of PST in the absence of corticosteroid. After decay of extant PST in steroid-free medium, hydrocortisone reinduced the expression of PST 3-5-fold. Western blots using mouse anti-bovine PST revealed corresponding increases in 32-kDa PST protein levels in response

to hydrocortisone. Steady state kinetic analyses indicated apparent Km values of 1-3 μM for 2-naphthol regardless of culture conditions.

These results suggest that detoxification of phenolic compds. by sulfation may be regulated by corticosteroids.

- ST phenol sulfotransferase bronchi hydrocortisone
- IT Corticosteroids, biological studies

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(cortisol regulation of phenol sulfotransferase expression in bronchial epithelium)

IT Bronchi

(epithelia, cortisol regulation of phenol sulfotransferase expression in bronchial epithelium)

IT 135-19-3, 2-Naphthol, biological studies

RL: ADV (Adverse effect, including toxicity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)

(cortisol regulation of phenol sulfotransferase expression in bronchial epithelium)

IT **50-23-7**, Cortisol

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(cortisol regulation of phenol sulfotransferase expression in bronchial epithelium)

IT 9026-09-9, Phenol sulfotransferase

RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(cortisol regulation of phenol sulfotransferase expression in bronchial epithelium)

IT **50-23-7**, Cortisol

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(cortisol regulation of phenol sulfotransferase expression in bronchial epithelium)

- RN 50-23-7 HCAPLUS
- CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 50 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:555385 HCAPLUS

- DN 119:155385
- ED Entered STN: 16 Oct 1993
- TI Preparation of horseradish peroxidase conjugates with

Cordero-Garcia PCT/US03/26233

```
water-soluble polymeric hydrocortisone derivatives
      Panarin, E. F.; Baikov, V. E.; Paskhina, O. G.
ΑU
      Inst. Vysokomol. Soedin., St. Petersburg, Russia
Zhurnal Prikladnoi Khimii (Sankt-Peterburg, Russian Federation) (1992),
CS
SO
      65(5), 1190-2
      CODEN: ZPKHAB; ISSN: 0044-4618
DT
      Journal
LA
      Russian
CC
      9-14 (Biochemical Methods)
      Section cross-reference(s): 7
      The title thermopolymers containing 1-3 mol. of horseradish peroxidase were
AB
      prepared from vinylpyrolidione, some quantity of allylamine (for peroxidase
      conjugation), and hydrocortisone 21-crotonate. The polymerization was
      done in EtOH or iso-PrOH at 65° for 7-8 h using dinitrileazobisisobutyric acid. The polymers of 40-180 KDa were
      prepared which contained ≤2 mol.% hydrocortisone and 1-2 mol.%
      allylamine. The peroxidase was conjugated via periodate oxidation method. The final preparation practically retained all the enzyme activity.
ST
      hydrocortisone polymer peroxidase conjunction EIA; vinylpyrrolidione
      copolymer hydrocortisone peroxidase EIA
ΙT
      Immunoassay
          (enzyme, polymeric hydrocortisone derivs. containing horseradish peroxidase
         for)
IT
      149935-70-6P
      RL: PREP (Preparation)
          (preparation of, horseradish peroxidase conjugates from, for EIA)
·IT
      31628-39-4DP, amides with dihydroxyoxoandrostenecarboxylate
      150045-24-2DP, amides with vinylpyrrolidone-allylamine copolymer
      RL: PREP (Preparation)
         (preparation of, peroxidase conjugate preparation for EIA in relation
         to)
      149935-70-6P
IT
      RL: PREP (Preparation)
          (preparation of, horseradish peroxidase conjugates from, for EIA)
RN
      149935-70-6 HCAPLUS
CN
      Pregn-4-ene-3, 20-dione, 21-[(bromoacetyl)oxy]-11, 17-dihydroxy-,
      (11\beta)-, compd. with ethenamine polymer with 1-ethenyl-2-pyrrolidinone
      (9CI) (CA INDEX NAME)
      CM
           1
      CRN 74755-65-0
      CMF C23 H31 Br O6
```

CM

CRN 28158-56-7

CMF (C6 H9 N O . C2 H5 N) \times

CCI PMS

> CM 3

CRN 593-67-9 CMF C2 H5 N

 $H_2C = CH - NH_2$

CM 4

CRN 88-12-0 CMF C6 H9 N O

L46 ANSWER 51 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN AN 1992:414293 HCAPLUS

DN 117:14293

Entered STN: 11 Jul 1992 ED

Methylprednisolone esters of hyaluronic acid in ophthalmic drug ΤI delivery: in vitro and in vivo release studies

ΑU Kyyronen, Kristiina; Hume, Lisbeth; Benedetti, Luca; Urtti, Arto; Topp, Elizabeth; Stella, Valentino

Dep. Pharm. Chem., Univ. Kansas, Lawrence, KS, 66045-2504, USA CS

International Journal of Pharmaceutics (1992), 80(2-3), 161-9 SO CODEN: IJPHDE; ISSN: 0378-5173

DT Journal

```
LA
     English
     63-5 (Pharmaceuticals)
     Section cross-reference(s): 1
AB
     Films and microspheres were prepared from various esters of
     hyaluronic acid. A model drug, methylprednisolone, was either
     phys. incorporated into the polymer matrix or chemical bound to the
     polymer backbone through an ester linkage. In vitro
     release from films with covalently bound drug was much slower (t50% = 71
     h) than that for phys. dispersed drug (t50% = 2.5-17 h).
     Methylprednisolone concns. in the tear fluid of New Zealand rabbits were
     measured after ocular application of drug (approx. 420 \mu g) in different
     dosage forms. When methylprednisolone was phys. dispersed in the polymer
     matrix, in vivo drug release from matrixes was slower than that observed in
     vitro. Compared with a suspension control, peak methylprednisolone concns. in tear fluid were 9-14 times lower after administration of drug
     in polymer films and AUCO-8h values were 4-7 times higher.
                                                                   These results
     imply that hyaluronic acid ester prepns. can increase the
     residence time of methylprednisolone in the tear fluid of rabbits.
     methylprednisolone eye delivery hyaluronic ester
ST
     Steroids, biological studies RL: BIOL (Biological study)
ΙT
        (eye delivery of, hyaluronic ester films and microspheres
        for)
ΙT
     Eye
        (methylprednisolone delivery to, hyaluronic ester films and
        microspheres for)
ΙT
        (methylprednisolone release in, from hyaluronic ester films
        and microspheres, eye delivery in relation to)
IT
     Solution rate
        (of methylprednisolone, from hyaluronic acid ester films and
        microspheres, in vitro and in tear fluid, eye delivery in relation to)
ΙT
     Drug bioavailability
        (of methylprednisolone, ocular, from hyaluronic ester films
        and microspheres)
IT
     Pharmaceutical dosage forms
        (films, hyaluronic esters, for methylprednisolone eye
        delivery)
ΙT
     Pharmaceutical dosage forms
        (microspheres, hyaluronic esters, for methylprednisolone eye
        delivery)
     Pharmaceutical dosage forms
IT
        (ophthalmic, of methylprednisolone, hyaluronic ester films
        and microspheres in, drug release from)
     83-43-2, Methylprednisolone
IT
     RL: BIOL (Biological study)
        (eye delivery of, hyaluronic ester films and microspheres
        for)
IT
     9004-61-9D, Hyaluronic acid, esters
                                             111744-92-4,
                          111745-19-8, Ethyl hyaluronate
     Benzyl hyaluronate
     RL: BIOL (Biological study)
         (films and microspheres, for methylprednisolone eye delivery)
IT
     141895-71-8
     RL: BIOL (Biological study)
         (methylprednisolone release from, in vitro and in tear fluid, as ocular
        delivery system)
     83-43-2, Methylprednisolone
ΙT
     RL: BIOL (Biological study)
        (eye delivery of, hyaluronic ester films and microspheres
```

for) RN 83-43-2 HCAPLUS CN Pregna-1, 4-diene-3, 20-dione, 11, 17, 21-trihydroxy-6-methyl-, $(6\alpha, 11\beta)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT 9004-61-9D, Hyaluronic acid, esters

RL: BIOL (Biological study)

(films and microspheres, for methylprednisolone eye delivery)

9004-61-9 HCAPLUS RN

Hyaluronic acid (8CI, 9CI) (CA INDEX NAME) CN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

ΙT 141895-71-8

RL: BIOL (Biological study)

(methylprednisolone release from, in vitro and in tear fluid, as ocular delivery system)

141895-71-8 HCAPLUS RN

CN Pregna-1, 4-diene-3, 20-dione, 11, 17, 21-trihydroxy-6-methyl-,

 $(6\alpha, 11\beta)$ -, compd. with hyaluronic acid (9CI) (CA INDEX NAME)

CM 1

9004-61-9 CRN

CMF Unspecified

PMS, MAN CCI

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 83-43-2

CMF C22 H30 O5

hyaluronate

111745-32-5

```
L46
     ANSWER 52 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1990:578137 HCAPLUS
DN
     113:178137
ED
     Entered STN: 09 Nov 1990
TI
     Microspheres of hyaluronic acid esters - fabrication methods and
     in vitro hydrocortisone release
     Benedetti, L. M.; Topp, E. M.; Stella, V. J. Dep. Pharm. Chem., Univ. Kansas, Lawrence, KS, 66045-2504, USA
ΑU
CS
     Journal of Controlled Release (1990), 13(1), 33-41
SO
     CODEN: JCREEC; ISSN: 0168-3659
DT
     Journal
     English
LA
CC
     63-5 (Pharmaceuticals)
     Microspheres 10 to 100 \mu m in diameter were prepared from various esters of
AR
     hyaluronic acid using a solvent evaporation method. A model compound,
     hydrocortisone, was incorporated into these microspheres. The drug can be
     either phys. dispersed in the polymer matrix, or chemical bound to the
     polymer backbone through an ester linkage. When the
     drug was phys. dispersed, its release into a well-stirred buffer solution was
     essentially complete in 10 min. When the drug was covalently bound to the
     polymer, the release was much slower, requiring more than 100 h in some
     cases. The release rate of covalently bound drug was constant (zero order)
     over most of the release period. The release of covalently bound drug
     seems to be controlled primarily by the hydrolysis of the ester bond.
ST
     hyaluronate ester microsphere hydrocortisone release
IT
     Solution rate
        (of hydrocortisone, from hyaluronate ester microspheres)
     Pharmaceutical dosage forms
TT
        (microspheres, of hyaluronate ester, hydrocortisone release
IΤ
     50-23-7D, Hydrocortisone, reaction products with
     hyaluronic acid esters
                              111744-91-3D, Pentyl hyaluronate
     , reaction products with hydrocortisone 111744-92-4D, Benzyl
     hyaluronate, reaction products with hydrocortisone
                                                            111745-19-8D,
     Ethyl hyaluronate, reaction products with hydrocortisone
     111745-32-5D, reaction products with hydrocortisone
                                                             129291-64-1D,
     reaction products with hydrocortisone
     RL: BIOL (Biological study)
        (microspheres, preparation of and drug release from)
     111744-91-3, Pentyl hyaluronate
                                        111744-92-4, Benzyl
IT
```

111745-19-8, Ethyl hyaluronate

129291-64-1, Dodecyl hyaluronate

RL: BIOL (Biological study)

(microspheres, preparation of and hydrocortisone release from)

50-23-7, Hydrocortisone RL: PROC (Process) ΙT

(release of, from hyaluronate ester microspheres)

50-23-7D, Hydrocortisone, reaction products with ΙT

hyaluronic acid esters

RL: BIOL (Biological study)

(microspheres, preparation of and drug release from)

RN 50-23-7 HCAPLUS

Pregn-4-ene-3, 20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX CN NAME)

Absolute stereochemistry.

50-23-7, Hydrocortisone RL: PROC (Process) IT

(release of, from hyaluronate ester microspheres)

RN 50-23-7 HCAPLUS

Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 53 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

1990:125120 HCAPLUS AN

112:125120 DN

Entered STN: 31 Mar 1990 ΕD

Microspheres of hyaluronic acid derivatives TI

Benedetti, L. M.; Topp, E. M.; Stella, V. J. ΑU

Res. Lab., Fidia SpA, Abano Terme, 35031, Italy CS

Congr. Int. Technol. Pharm., 5th (1989), Volume 2, 286-93 Publisher: SO

```
Assoc. Pharm. Galenique Ind., Chatenay Malabry, Fr.
     CODEN: 56SEA5
DT
     Conference
LΑ
     English
CC
     63-6 (Pharmaceuticals)
AB
     Esters of hyaluronic acid (HA) were evaluated as potential
     polymeric materials for the production of microspheres. Whereas
     esterification to simple aliphatic or cyclic aliphatic alcs. leaves the
     desirable natural HA properties such as biocompatibility,
     biodegradability, and nonimmunogenicity unchanged, the phys. properties of
     the polymer can be changed, i.e., the high water solubility of HA may be
     reduced, potentially providing prolonged release. Microspheres were
     produced by emulsion solvent evaporation and extraction solvent evaporation
methods.
     Drugs were successfully incorporated into the microsphere, either phys.
     dispersed in the polymer matrix, or chemical bound to the polymer
     backbone through an ester linkage. Drug release was a function
     of incorporation: when the drug was phys. dispersed, its release was
     completed within 10 min; when the drug was covalently bound to polymer,
     the release was much slower, requiring more than 100 h in some cases. The
     release rate of covalently bound drug was constant (zero order) over most of
     the release period for all corticosteroids tested. This desirable release
     profile is thought to be due to the combined effects of hydrolysis and
     hydration.
ST
     hydrocortisone hyaluronate microsphere
     Kinetics of hydrolysis
ΙT
        (of hydrocortisone hyaluronate microspheres)
ΙT
     Solution rate
        (of hydrocortisone, from hyaluronic acid ester microspheres)
ΙT
     Pharmaceutical dosage forms
        (microspheres, hyaluronic acid esters, preparation of and
        hydrocortisone release from)
     9004-61-9D, Hyaluronic acid, esters
ΙT
                                           111744-91-3
     111745-19-8
     RL: BIOL (Biological study)
        (microspheres containing, hydrocortisone incorporation in and release from)
     50-23-7, Hydrocortisone
IT
     RL: BIOL (Biological study)
        (microspheres, hyaluronic acid ester-containing, preparation of and
        drug release from)
TΤ
     111745-13-2
     RL: BIOL (Biological study)
        (microspheres, preparation of and drug release from).
     9004-61-9D, Hyaluronic acid, esters
     RL: BIOL (Biological study)
        (microspheres containing, hydrocortisone incorporation in and release from)
RN
     9004-61-9 HCAPLUS
CN
     Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
ΙT
     50-23-7, Hydrocortisone
     RL: BIOL (Biological study)
        (microspheres, hyaluronic acid ester-containing, preparation of and
        drug release from)
     50-23-7 HCAPLUS
RN
     Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11\beta)- (9CI) (CA INDEX
CN
     NAME)
```

Search completed by David Schreiber x22526

ΙT 111745-13-2

RL: BIOL (Biological study)

(microspheres, preparation of and drug release from)

RN 111745-13-2 HCAPLUS

Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β) -, hyaluronate (9CI) (CA INDEX NAME)

CM 1

CRN 9004-61-9 CMF Unspecified CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 50-23-7 CMF C21 H30 O5

Absolute stereochemistry.

ANSWER 54 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

AN 1988:588365 HCAPLUS

109:188365 DN

ED Entered STN: 25 Nov 1988

Improvement in the purification of an antisteroid antiserum resistant to conventional immunoadsorption chromatography

Bouzerna, N.; Hammadi, H.; Richard, C.; Formstecher, P.; Dautrevaux, M. ΑU

CS

Lab. Biochim. Struct., Fac. Med., Lille, 59045, Fr. Journal of Immunological Methods (1988), 112(2), 251-9

CODEN: JIMMBG; ISSN: 0022-1759

DT Journal

LA English

CC 15-1 (Immunochemistry)

Section cross-reference(s): 2

Antibodies against dexamethasone, a synthetic steroid, have been induced AΒ in rabbits immunized with a 3-carboxymethyloxime dexamethasone derivative conjugated to bovine serum albumin. The antiserum displaying the highest affinity for dexamethasone (KD = 0.5 nM) appeared to be resistant to purification on an agarose matrix bearing the same 3-carboxy-methyloxime dexamethasone derivative No desorption of active antibodies could be obtained whatever the eluting buffer used. Electrophoretic elution gave only poor results. However, an improvement in the purification of these antibodies was achieved by changing the connecting arm for steroid linkage to the agarose beads. A 17-fold purification and a 32% recovery of active specific antisteroid antibodies were obtained using a column bearing a 17β -carboxamide dexamethasone derivative Good results (23-fold purification and 30% recovery) were also obtained with a com. available preactivated high-performance silica column derivatized with an aminated 3-carboxymethyloxime derivative of dexamethasone. The more efficient diffusion of the eluting solution through the pores of a high performance stationary phase made of small diameter rigid beads probably explained the improved results, when compared to those obtained with agarose beads bearing the same dexamethasone derivative

ST dexamethasone antibody purifn; adsorbent chromatog dexamethasone antibody

IT Antibodies

RL: PROC (Process)

(to dexamethasone, purification of, by chromatog., improvements in)

IT 50-02-2, Dexamethasone

RL: BIOL (Biological study)

(antibodies to, purification of, by chromatog., improvements in)

7631-86-9DP, Silica, reaction products with dexamethasone carboxymethyloxime 37927-01-8DP, reaction products with Sepharose CL4B 61970-08-9DP, reaction products with dexamethasone derivs. 88378-32-9DP, reaction products with Sepharose or silica

RL: PREP (Preparation)

(preparation and antibodies to dexamethasone purification by)

IT 50-02-2, Dexamethasone

RL: BIOL (Biological study)

(antibodies to, purification of, by chromatog., improvements in)

RN 50-02-2 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, $(11\beta, 16\alpha)$ - (9CI) (CA INDEX NAME)

```
ANSWER 55 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
L46
     1988:148673 HCAPLUS
AN
     108:148673
DN
     Entered STN: 30 Apr 1988
ED
     Effects of interleukin-1 and anti-inflammatory drugs on the degradation of
     human articular cartilage
     Shinmei, M.; Kikuchi, T.; Masuda, K.; Shimomura, Y. Dep. Orthop. Surg., Natl. Def. Med. Coll., Tokorozawa, Japan
ΑU
CS
     Drugs (1988), 35(Suppl. 1), 33-41
CODEN: DRUGAY; ISSN: 0012-6667
SO
DT
     Journal
LA
     English
     15-8 (Immunochemistry)
     Section cross-reference(s): 1
     It has been suggested that metalloproteases produced by chondrocytes play
     an important role in cartilage breakdown in joint diseases. Here, changes
     in enzyme activities in human rheumatoid and osteoarthritic articular
     cartilage were investigated. Cartilage fragments were incubated with
     various drugs for 48 h. The concentrated culture media were used as enzyme
     solns. Collagenase was assayed using FITC-collagen as the substrate.
     Proteoglycanase (PGase) was measured either by the release of 35S-labeled
     proteoglycans from cartilage into the medium, or by enzyme assay using
     proteoglycan monomer bound to fluorescein-conjugated
     hyaluronic acid as the substrate. Collagenase and proteoglycanase
     were found only in trace amts. in the concentrated media of healthy cartilage.
     Interleukin-1 (IL-1) enhanced the enzyme activities significantly. Marked
     increases of enzyme activities were observed in the concentrated media of
     rheumatoid (RA) and osteoarthritic (OA) cartilage. The sensitivity to
     interleukin-1 was also higher in OA and RA cartilage compared with healthy
     cartilage. Dexamethasone (10-6 mol/L) markedly depressed enzyme activity.
     Tiaprofenic acid (4 + 10-5 mol/L) also decreased enzyme activity,
     whereas indomethacin (4 + 10-6 \text{ mol/L}) and naproxen (3 + 10-4 \text{ mol/L})
     mol/L) had no effect.
ST
     antiinflammatory drug cartilage degrdn enzyme; interleukin 1 cartilage
     degrdn enzyme
TΤ
     Cartilage
        (proteinase of, interleukin 1 and anti-inflammatory drugs effect on, in
        human rheumatoid and osteo-arthritis)
     Lymphokines and Cytokines
ΙT
     RL: BIOL (Biological study)
        (interleukin 1, proteinase of cartilage enhancement by, in human
        rheumatoid and osteo-arthritis)
ΙT
     Arthritis
        (osteo-, proteinase of cartilage in, interleukin 1 and
        anti-inflammatory drugs effect on, of human)
ΙT
     Arthritis
        (rheumatoid, proteinase of cartilage in, interleukin 1 and
        anti-inflammatory drugs effect on, of human)
     50-02-2, Dexamethasone
                             53-86-1
                                         22204-53-1, Naproxen
IT
     33005-95-7
     RL: BIOL (Biological study)
        (interleukin 1-induced proteinases of cartilage response to, in human)
     9001-12-1, Collagenase 79955-99-0, Proteoglycanase
ΙT
     RL: PROC (Process)
        (of cartilage, interleukin 1 enhancement of, in rheumatoid and
        osteoarthritis in human)
     50-02-2, Dexamethasone
ΙT
     RL: BIOL (Biological study)
```

(interleukin 1-induced proteinases of cartilage response to, in human)

RN 50-02-2 HCAPLUS

Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, CN (CA INDEX NAME) $(11\beta, 16\alpha) - (9CI)$

Absolute stereochemistry.

ANSWER 56 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

ΑN 1987:490258 HCAPLUS

DN 107:90258

Entered STN: 19 Sep 1987 ED

Transformation in vitro and covalent modification with biotin of steroid TIaffinity-purified rat liver glucocorticoid hormone-receptor complex

ΑU

Hapgood, Janet P.; Von Holt, Claus Res. Cent. Mol. Biol., Univ. Cape Town, Rondebosch, 7700, S. Afr. CS

European Journal of Biochemistry (1987), 166(2), 415-20 SO

CODEN: EJBCAI; ISSN: 0014-2956

DTJournal

LAEnglish

CC 2-4 (Mammalian Hormones)

The molybdate-stabilized rat liver glucocorticoid-receptor complex was AB purified 9000-fold with a 46% yield by steroid-affinity chromatog. and DEAE-Sephacel ion-exchange chromatog. The purified glucocorticoid receptor was identified as a 90-92-kilodalton protein by SDS/polyacrylamide gel electrophoresis. Raising the temperature to 25° in the absence of molybdate resulted in increased binding of the receptor complex to DNA-cellulose or nuclei, similar to the affect on the cytosolic complex. The purified complex had a sedimentation coefficient of 9-10 S before and after heat treatment in the absence of molybdate. The appearance of smaller 3-4 S species was unrelated to the extent of DNA-cellulose binding of the complex. The process termed transformation, i.e. increasing the affinity for DNA, was not concomitant with subunit dissociation or loss of RNA. Highly purified glucocorticoid receptor could be covalently modified with biotin to retain its steroid-binding activity but with a 50% decrease in nuclear binding capacity. The biotin-modified complex reacted with streptavidin in solution without losing its steroid.

biotinylated glucocorticoid receptor complex transformation ST

Cell nucleus TΤ

Deoxyribonucleic acids

RL: BIOL (Biological study)

(biotinylated glucocorticoid-receptor complexes binding by)

ΙT Receptors

RL: SPN (Synthetic preparation); PREP (Preparation)

(glucocorticoid complexes, preparation and functional properties of)

IT Liver, composition (glucocorticoid-receptor complexes of, biotinylation and transformation of)

IT Corticosteroids, compounds

RL: SPN (Synthetic preparation); PREP (Preparation)

(gluco-, complexes, with receptors, preparation and functional properties of)

IT 58-85-5DP, Biotin, glucocorticoid-receptor complex conjugates

76-25-5DP, receptor complexes

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and functional properties of)

IT 76-25-5DP, receptor complexes

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and functional properties of)

RN 76-25-5 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,21-dihydroxy-16,17-[(1-methylethylidene)bis(oxy)]-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 57 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1984:61991 HCAPLUS

DN 100:61991

ED Entered STN: 12 May 1984

TI High affinity binding of glucocorticoid-receptor complexes to linker-DNA associated with tightly bound nonhistone chromosomal proteins

AU Kishibay, John Stephen

CS Univ. South. California, Los Angeles, CA, USA

SO (1982) No pp. Given Avail.: USC

From: Diss. Abstr. Int. B 1983, 44(2), 387

DT Dissertation

LA English

CC 2-4 (Mammalian Hormones)

Section cross-reference(s): 6

AB Unavailable

ST glucocorticoid receptor complex DNA binding

IT Receptors

RL: BIOL (Biological study)

(glucocorticoid complexes with, linker-DNA binding of)

IT Chromosome

(proteins of, glucocorticoid-receptor complexes binding to linker-DNA associated with)

IT Corticosteroids, compounds

RL: BIOL (Biological study)

(gluco-, receptor complexes, linker-DNA binding of)

```
IT
     Deoxyribonucleic acids
     RL: BIOL (Biological study)
         (linker, glucocorticoid-receptor complexes binding by, chromosomal
        proteins association and)
ΙT
     76-25-5D, receptors complexes
     RL: PROC (Process)
         (linker DNA binding of)
     ANSWER 58 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
L46
     1981:600068 HCAPLUS
AN
     95:200068
DN
     Entered STN: 12 May 1984
ED
ΤI
     Steric hindrance enzyme immunoassay (SHEIA) using
     \beta-galactosidase as an enzyme label and maleimide derivative of hapten
     (or antigen) for enzyme coupling
ΑU
     Castro, Albert; Monji, Nobuo
     Sch. Med., Univ. Miami, Miami, FL, 33101, USA
Methods in Enzymology (1981), 73(Immunochem. Tech., Part B), 523-42
CS
SO
     CODEN: MENZAU; ISSN: 0076-6879
DΤ
     Journal
LA
     English
CC
     9-6 (Biochemical Methods)
     Section cross-reference(s): 1, 2
AΒ
     Preparation of m-maleimidobenzoyl hapten derivs. and their subsequent coupling
     to \beta-galactosidase were described for the determination of cortisol, T4,
     digoxin, and choriomammotropin (placental lactogen) by enzyme immunoassay with a 2nd-antibody precipitation method. Sensitivities were comparable to
     radioimmunoassay, and specificities were high. In addition, SHEIA methods
     were described for T4 and choriomammotropin. Enzyme affinity gels (with
     agarose-\beta-galactosylamine conjugates as affinity gels) were
     used to precipitate unbound enzyme-antigen conjugates.
     steric hindrance enzyme immunoassay; hormone steric
     hindrance enzyme immunoassay; drug steric hindrance enzyme
     immunoassay; galactosidase label immunoassay maleimide coupling
ΙT
     Hormones
     RL: ANT (Analyte); ANST (Analytical study)
         (determination of, by steric-hindrance enzyme immunoassay, maleimide
        as coupling agent for)
IT
     Pharmaceutical analysis
         (steric-hindrance enzyme immunoassay in, maleimide as
        coupling agent for)
ΙT
     Immunochemistry
         (steric-hindrance enzyme immunoassay, maleimide as coupling
        agent in label preparation for)
IT
     Chromatography, column and liquid
         (affinity, of antigen-enzyme conjugates in steric
        -hindrance enzyme immunoassay)
ΙT
     Immunochemistry
         (enzyme immunoassay, maleimide as coupling agent in label preparation for)
ΙT
     72296-23-2
     RL: ANST (Analytical study)
         (as affinity gel, in hormone steric-hindrance enzyme
        immunoassay)
IT
     17057-07-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (chlorination of)
     9035-54-5
ΙT
     RL: ANT (Analyte); ANST (Analytical study)
         (determination of, by steric-hindrance enzyme immunoassay)
```

```
50-23-7
ΙT
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in blood plasma by enzyme immunoassay)
     51-48-9, analysis
IT
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in blood serum by steric-hindrance enzyme
ΙT
     61960-57-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, with antigens)
     75799-03-0P 79859-11-3P
ΙT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, with maleimidobenzoyl chloride)
ΙT
     69343-52-8P 73499-11-3P 73499-12-4P 75804-34-1P
     RL: PREP (Preparation)
        (preparation of)
ΙT
     9031-11-2DP, reaction products with maleimidobenzoyl-antigen derivs.
     69343-52-8DP, reaction products with galactosidase 73499-11-3DP,
     reaction products with galactosidase 73499-12-4DP, reaction
     products with galactosidase 75804-34-1DP, reaction products with
     galactosidase
     RL: PREP (Preparation)
        (preparation of, for enzyme immunoassay)
IT
     9035-54-5DP, maleimidobenzoyl derivative, reaction products with galactosidase
     RL: PREP (Preparation)
        (preparation of, for steric-hindrance enzyme immunoassay)
     106-50-3, reactions
TΤ
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with antigen derivs.)
     32180-11-3
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with maleimidobenzoyl chloride)
IT
     2203-97-6
                 40006-02-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, with phenylenediamine)
     50-23-7
IT
     RL: ANT (Analyte); ANST (Analytical study)
        (determination of, in blood plasma by enzyme immunoassay)
     50-23-7 HCAPLUS
     Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11\beta)- (9CI) (CA INDEX
     NAME)
```

IT 79859-11-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with maleimidobenzoyl chloride)

RN 79859-11-3 HCAPLUS

CN Pregn-4-ene-3,20-dione, $21-[4-[(4-aminophenyl)amino]-1,4-dioxobutoxy]-11,17-dihydroxy-, (11<math>\beta$)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 73499-11-3P 73499-12-4P

RL: PREP (Preparation)

(preparation of)

RN 73499-11-3 HCAPLUS

CN Pregn-4-ene-3,20-dione, 21-[4-[[4-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)benzoyl]amino]phenyl]amino]-1,4-dioxobutoxy]-11,17-dihydroxy-, (11β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

0=

PAGE 1-B

RN 73499-12-4 HCAPLUS

CN Pregn-4-ene-3,20-dione, 21-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)benzoyl]oxy]-11,17-dihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

TT 73499-11-3DP, reaction products with galactosidase
73499-12-4DP, reaction products with galactosidase
RL: PREP (Preparation)

(preparation of, for enzyme immunoassay)

RN 73499-11-3 HCAPLUS

Pregn-4-ene-3,20-dione, $21-[4-[[4-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)benzoyl]amino]phenyl]amino]-1,4-dioxobutoxy]-11,17-dihydroxy-, (11<math>\beta$)- (9CI) (CA INDEX NAME)

PAGE 1-B

0==

RN 73499-12-4 HCAPLUS

CN Pregn-4-ene-3,20-dione, 21-[[3-(2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl)benzoyl]oxy]-11,17-dihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

IT 2203-97-6

> RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with phenylenediamine)

RN 2203-97-6 HCAPLUS

Pregn-4-ene-3,20-dione, 21-(3-carboxy-1-oxopropoxy)-11,17-dihydroxy-, CN (11β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L46 ANSWER 59 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

1981:546489 HCAPLUS ΑN

DN 95:146489

ED Entered STN: 12 May 1984

Studies on steroids. CLXVI. Effect of bridge heterologous combination on sensitivity in enzyme immunoassay for cortisol

Hosoda, Hiroshi; Kawamura, Nahoko; Nambara, Toshio ΑU

CS

Pharm. Inst., Tohoku Univ., Sendai, 980, Japan Chemical & Pharmaceutical Bulletin (1981), 29(7), 1969-74 SO CODEN: CPBTAL; ISSN: 0009-2363

DTJournal

LA English

CC 9-6 (Biochemical Methods) Section cross-reference(s): 2

AB The effect of the bridge heterologous combination of antiserum and enzyme-labeled steroid on the sensitivity in a heterogeneous enzyme immunoassay of cortisol was investigated. The enzyme labeling of cortisol was carried out by the N-succinimidyl ester method. Four cortisol derivs.

possessing different bridges at C-4 were covalently linked to

 β -galactosidase at various molar ratios of steroid to enzyme. anti-cortisol antiserums were those raised against the conjugates of these haptenic derivs. with bovine serum albumin. The sensitivities obtainable with 4 homologous and 12 heterologous systems were tested. When thioether derivs. were used for enzyme labeling, the effectiveness of heterol. on assay specificity was dependent upon the length of the bridge. The heterologous system using the steroid-enzyme conjugate obtained from a hapten having a shorter bridge than that used for antibody production resulted in an increase in sensitivity of the assay, whereas the use of a longer bridge was ineffective. This phenomenon can be explained in terms of the steric interaction between antibody and labeled enzyme. STsteroid enzyme immunoassay; cortisol enzyme immunoassay Steroids, analysis ITRL: ANT (Analyte); ANST (Analytical study) (determination of, by enzyme immunoassay, heterologous systems sensitivity in) IT Enzymes RL: ANST (Analytical study) (in immunoassays, for steroids, heterologous systems in) IT Immunochemistry (enzyme immunoassay, of steroids, heterologous systems in) ΙT 50-23-7 RL: ANT (Analyte); ANST (Analytical study) (determination of, by enzyme immunoassay, heterologous systems sensitivity in) 9031-11-2DP, carboxylated cortisol conjugates TT 74997-22-1DP, galactosidase conjugates 74997-23-2DP, galactosidase conjugates 74997-28-7DP, galactosidase conjugates 76824-38-9DP, galactosidase conjugates RL: PREP (Preparation) (preparation of, for enzyme immunoassay of cortisol) IT 50-23-7 RL: ANT (Analyte); ANST (Analytical study) (determination of, by enzyme immunoassay, heterologous systems sensitivity

Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX

Absolute stereochemistry.

NAME)

50-23-7 HCAPLUS

in)

RN

CN

TT 74997-22-1DP, galactosidase conjugates
74997-23-2DP, galactosidase conjugates

74997-28-7DP, galactosidase conjugates 76824-38-9DP, galactosidase conjugates

RL: PREP (Preparation)

(preparation of, for enzyme immunoassay of cortisol)

RN 74997-22-1 HCAPLUS

CN Acetic acid, [[(11 β)-11,17,21-trihydroxy-3,20-dioxopregn-4-en-4-yl]thio]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 74997-23-2 HCAPLUS

CN Propanoic acid, $3-[[(11\beta)-11,17,21-trihydroxy-3,20-dioxopregn-4-en-4-yl]thio]- (9CI) (CA INDEX NAME)$

Absolute stereochemistry.

RN 74997-28-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, $4-[[2-(3-carboxy-1-oxopropoxy)ethyl]thio]-11,17,21-trihydroxy-, (11<math>\beta$)- (9CI) (CA INDEX NAME)

76824-38-9 HCAPLUS RN

Pregn-4-ene-3,20-dione, 4-(3-carboxy-1-oxopropoxy)-11,17,21-trihydroxy-, CN (11β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 60 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46

1980:528195 HCAPLUS AN

DN 93:128195

ED Entered STN: 12 May 1984

ΤI Receptor binding of fluorescein-labeled steroids

Daxenbichler, G.; Grill, H. J.; Domanig, R.; Moser, E.; Dapunt, O. Dep. Obstet. Gynecol., Univ. Innsbruck, Innsbruck, Austria AU

CS

Journal of Steroid Biochemistry (1980), 13(5), 489-93 SO CODEN: JSTBBK; ISSN: 0022-4731

DT Journal

LA English

9-4 (Biochemical Methods) CC

Section cross-reference(s): 2

Fluorescent derivs. of 17β -estradiol (I), deoxycorticosterone (II), AΒ and prednisolone (III) were synthesized by coupling I-hemisuccinate, II-21-hemisuccinate, and III-21-hemisuccinate to N-fluoresceinyl-5,N'-(6amino) hexylthiourea. The long chain of C and N atoms between the steroid

Cordero-Garcia PCT/US03/26233

and fluorescein was introduced to avoid **steric** hindrance of the steroid-receptor interaction. The **KD** values for binding of I and I-fluorescein-conjugate to rabbit uterine cytosol receptors were 0.8 and 1.5 nM, resp., and those for binding of progesterone and II-fluorescein-conjugate to progesterone receptors were 2.3 nM and 9.7 mM, resp. The **KD** values for binding of dexamethasone and III-fluorescein conjugate to rabbit liver glucocorticoid receptors were 3.4 and 7.3 nM resp.

ST fluorescein labeled steroid receptor binding; estradiol fluorescein labeled receptor binding; deoxycorticosterone fluorescein labeled receptor binding; prednisolone fluorescein labeled receptor binding; immunofluorescence microscopy steroid receptor

IT Steroids, compounds

RL: PREP (Preparation)

(fluorescein conjugates, preparation and receptor binding of)

IT Receptors

RL: ANST (Analytical study)

(for steroids, steroid-fluorescein conjugates binding by)

IT 50-24-8DP, fluorescein conjugate 50-28-2DP, fluorescein conjugate 64-85-7DP, fluorescein conjugate 2321-07-5DP, steroid conjugates 74902-44-6DP, reaction products with steroids

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and receptor binding of)

IT 50-24-8DP, fluorescein conjugate

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and receptor binding of)

RN 50-24-8 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 61 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1965:29835 HCAPLUS

DN 62:29835

OREF 62:5313c-d

ED Entered STN: 22 Apr 2001

TI Relations between polarographic behavior of steroids and their structure

AU Hrdy, O.

CS Staatl. Inst. Arzneimittelkontrolle, Prague

SO Abhandl. Deut. Akad. Wiss. Berlin, Kl. Chem., Geol. Biol. (1964), (1), 109-11

103-11

DT Journal

LA German

CC 42 (Steroids)

AB The variation in E1/2 of 10 different steroids with a double bond conjugated to the carbonyl group was shown graphically to be a linear function of pH from about pH 3 to 9 (in buffers containing 50% EtOH). The E1/2 varies with the position of the conjugated system in the mol., and on the steric position of the electroneg. constituents. Steroids bearing an OH group α to an oxo group and showing keto-enol tautomerism have an E1/2 more neg. than unsubstituted steroids. An oscillopolarographic study of 40 steroids demonstrated a correlation between the cathodic incision and the OH substituent of the steroid.

50-02-2, Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11β, 17, 21-trihydroxy-16α-methyl- 50-22-6, Corticosterone 50-23-7, Cortisol 53-03-2, Pregna-1, 4-diene-3, 11, 20-trione, 17, 21-dihydroxy- 124-94-7, Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11β, 16α, 17, 21-tetrahydroxy-(polarography of)

RN 50-02-2 HCAPLUS

CN Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, (11β, 16α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-22-6 HCAPLUS CN Pregn-4-ene-3,20-dione, 11,21-dihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124-94-7 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,16,17,21-tetrahydroxy-, $(11\beta,16\alpha)$ - (9CI) (CA INDEX NAME)

L46 ANSWER 62 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1958:45489 HCAPLUS

DN 52:45489

OREF 52:8179h-i,8180a-f

ED Entered STN: 22 Apr 2001

TI Synthesis of cortisone. XX. Infrared absorption of α -halooxosteroids

AU Cummins, E. G.; Page, J. E.

CS Glaxo Labs. Ltd., Middlesex, UK

SO Journal of the Chemical Society, Abstracts (1957) 3847-58

CODEN: JCSAAZ; ISSN: 0590-9791

DT Journal

AB

LA Unavailable

CC 10 (Organic Chemistry)

cf. C.A. 51, 12113d. The infrared absorption between 4000 and 400 cm. -1of cyclohexanones, oxosteroids, oxosteroidal sapogenins, α -halooxosteroids, α -bromooxotriterpenoids, and related substances were examined and the effect of α -halogen substituents on the CO frequency of oxosteroids and -triterpenoids was discussed. Low-frequency skeletal and C-H deformation bands that appear to be characterteristic of ketone and acetate groups were identified and distinguished from "halogen-sensitive" bands characteristic of the type of halogen substituent. An equatorial α -halo substituent absorbed at a higher frequency than the corresponding axial one. The carbonyl stretching frequencies in CS2 solution and steric configurations of 62 compds. were studied. This included chloro-, bromo-, and iodooxosteroids and was extended to α -chloro- and bromooxoisosapogenins showed that the CO frequency displacement hypothesis of Jones, et al. (C.A. 46, 827b), held for α -halogenated 2-, 3-, 6-, 7-, 11-, and 12-oxosteroids. An equatorial Cl caused a slightly greater CO frequency displacement than an equatorial Br, which in turn produced a larger displacement than an equatorial iodine substituent; an axial Cl produced a smaller displacement than an equatorial one, but a larger displacement than an axial Br and axial iodine substituents. An equatorial Br atom displaced by 22 cm.-1 the absorption frequency of the 7-oxo group; an axial 6-Br had no effect. Halogen atoms not adjacent to an oxo group have little or no effect on the CO frequency. The prominent absorption bands which appeared above 1350 cm.-1 were mainly of simple contour. At lower frequencies the spectra were more complex and the frequency and intensity of the bands were readily affected by small changes in the mol. The bands are usually much weaker than the CO and C-O stretching bands found at higher frequencies. The low-frequency (700-400 cm.-1) spectra of cyclohexanones and oxosteroids have received scant attention. Values for the frequencies and apparent mol. extinction coeffs. of the principal bands between 800 and 400 cm.-1 in the spectra of

 11α -methylcyclohexanones and related substances were summarized in a table. The apparent mol. extinction coefficient values provide information on the relative, but not the absolute band intensity. With these compds. it is only possible at present to make empirical structural assignments. low-frequency spectra of 21 steroids, isosapogenins, and triterpenoids were tabulated and shown to be more complex and contain stronger bands The 550-500 cm.-1 bands for than those of cyclohexanones. cholestan- 3β -ol were weaker than those for cholestan- and coprostan-3-one. 11-0xo- and 11β -hydroxysteroids absorbed relatively strongly at about 632-623 and 625 cm.-1, resp., and were distinguished from 3β -acetoxysteroids. The relatively strong bands in the 900-750 cm.-1 region of the cholestenone spectra were associated with out-of-plane C-H bending vibrations of the conjugated ethylenic linkages. The skeletal and C-H deformation oxo bands for 23 α -halooxosteroids appeared at slightly higher frequencies than, but have apparent mol. extinction coeffs. similar to, those for the corresponding unhalogenated oxosteroids. The frequency and apparent mol. extinction coefficient of the bands depend on the nature and conformation of the halogen atom. Axial halo substituents in general absorb at a lower frequency, and frequently yield weaker absorption bands, than the corresponding equatorial substituents. The effect of an adjacent ketone group on the absorption frequency and apparent mol. extinction coefficient of the halogen-sensitive vibration for 2- and 3-halocholestanes was tabulated. An adjacent ketone group displaced the frequency of an equatorial Cl or Br substituent by about 85 cm.-1 to higher frequencies; the frequency of an axial substituent suffers a smaller displacement (about 20 cm.-1) in either a pos. or a neg. direction. Infrared spectra (of α -halo keto steroids) Steroids $(\alpha$ -halo keto, spectra of) 5α -Ergostan-11-one, 12α -bromo- 3β -hydroxy-5α-Ergostan-11-one, 9-bromo-3β-hydroxy-(acetates, spectra of) 5α -Cholestan-7-one, 6α -bromo-3 β -hydroxy-, acetates 5α -Cholestan-7-one, 6β -bromo- 3β -hydroxy-, acetates Hecogenin, 23a-bromo-, acetate (spectra of) 5α -Cholestan-3-one, 4α -bromo- 2α -iodo- 5α -Ergost-9(11)-en-3-one, 2α , 4α -dibromo-Hecogenin, 23b-bromo-, acetate Tigogenin, 23a-bromo-12α-chloro-11-oxo-, acetate (spectrum of) 113-00-8, Guanidine (heterocyclic analogs) **53-06-5**, Cortisone (preparation of) 583-60-8, Cyclohexanone, 2-methyl- 591-24-2, Cyclohexanone, 3-methyl-604-35-3, Cholesterol, acetate 1193-47-1, Cyclohexanone, 2,2-dimethyl-1255-88-5, 5α -Cholestan-3 β -ol, acetate 1256-73-1, 1256-74-2, 5α -Lanost-8-en-3-one, 2β -bromo- 5α -Lanost-8-en-3-one, 2α -bromo-1452 - 34 - 2 5α -Cholestan-3-one, 2α -bromo- 1452-36-4, 1755-27-7, 5α -Cholestan-3-5α-Cholest-1-en-3-one, 2-bromo--chloro- 2042-05-9, 5α -Cholestan-3-2231-44-9, 5α -Cholestan-3-one, one, 4α -bromo- 2α -chloroone, 4α-bromo-2β-chloro-2239-53-4, 5α -Cholestan-3-one, 2,2-dibromo-2239-57-8, 5α -Cholestan-3-one, 2α , 4α -dibromo-2516-50-9, 5α -Cholestan-3-one, 2α -chloro- 2565-05-1,

ΙT

ΙT

IT

ΙT

ΙT

ΙT

ΙT

IT

```
5\alpha-Cholestan-3-one, 2\beta-bromo-2\alpha-chloro- 2816-57-1,
       Cyclohexanone, 2,6-dimethyl- 3464-61-7, Cholest-4-en-3-one,
       6β-bromo-
                     3464-62-8, Cholest-4-en-3-one, 6\alpha-bromo-
       4240-53-3, 5\alpha-Cholest-1-en-3-one, 4\alpha-bromo-
                                                                      5130-60-9,
       Hecogenin, 11\alpha, 23a-dibromo-, acetate
                                                          5837-41-2,
       5\beta-Cholestan-6-one, 3\beta-chloro- 6593-15-3, 5\alpha-Lanostan-3-
       one, 2\alpha-bromo- 21072-85-5, 5\beta-Cholestan-6-one,
       3\alpha-chloro- 26671-24-9, Cholest-4-en-3-one, 2\alpha-bromo-
      116027-43-1, 5\alpha-Ergostan-3-one, 4\alpha-bromo-11\beta-hydroxy-116028-78-5, 5\alpha-Ergostan-3-one, 2\alpha-bromo-11\beta-hydroxy-117865-42-6, 5\alpha-Lanostan-3-one, 2\beta-bromo-121193-52-0,
       Hecogenin, 23a-bromo-
                                       122651-21-2, Hecogenin, 11\alpha, 23a-dibromo-
           (spectra of)
IT
       108-93-0, Cyclohexanol
                                      108-94-1, Cyclohexanone 110-82-7, Cyclohexane
      566-88-1, 5\alpha-Cholestan-3-one 566-91-6, Cholesta-1, 4-dien-3-one 566-93-8, Cholesta-4, 6-dien-3-one 570-67-2, 5\alpha-Cholestan-2-one 583-59-5, Cyclohexanol, 2-methyl- 601-53-6, 5\beta-Cholestan-3-one
                                               601-55-8, 5\alpha-Cholest-1-en-3-one 915-35-5, Hecogenin, acetate 1195-93-3,
       601-54-7, Cholest-5-en-3-one
       601-57-0, Cholest-4-en-3-one
       Cyclohexanone, 2,2,6,6-tetramethyl- 1255-26-1, 5\alpha-Lanost-8-en-3-
               1973-32-6, Cholest-4-en-3-one, 2\alpha-chloro- 2042-01-5,
      2,2,6-trimethyl- 2516-55-4, 5\alpha-Cholestan-3-one, 2\alpha-iodo-
       2530-07-6, Tigogenin, acetate 4352-06-1, 5\alpha-Pregnan-3\beta-ol
       4639-29-6, 5α-Lanostan-3-one 4947-79-9, Tigogenin, 11-oxo-,
                  4947-81-3, Hecogenin, 11\alpha, 23b-dibromo-, acetate
       acetate
       6038-71-7, 5\alpha-Cholestan-7-one, 3\beta-hydroxy-, acetate
       13713-79-6, 5\beta-Cholestan-6-one 20304-38-5, 5\alpha-Cholestan-6-one, 5-chloro- 28282-22-6, Allobetulone 32122-44-4, Ether, methyl
       2-methylcyclohexyl 52777-11-4, 5\alpha-Ergostane-3,11-dione
       55781-37-8, Allobetulone, 2α-bromo-
                                                           77299-81-1,
       5\alpha\text{-Cholestan-2-one},\ 3\alpha\text{-iodo-}\ 96374\text{-04-8}, \\ 5\alpha\text{-Ergostan-11-one},\ 3\beta\text{-hydroxy-}\ 103159\text{-40-6},
       5\alpha-Ergostane-3,11-dione, 2\alpha, 4\alpha-dibromo- 103270-65-1, 5\alpha-Ergostane-3,11-dione, 2\alpha-bromo- 115487-27-9,
       5\alpha-Ergostan-3-one, 2\alpha, 4\alpha-dibromo-11\beta-hydroxy-
       116028-80-9, 5\alpha-Ergostan-3-one, 11\beta-hydroxy- 116152-16-0,
      5\alpha-Ergost-9(11)-en-3-one 117371-95-6, 5\alpha-Lanostan-3-one, 2,2-dibromo- 117895-70-2, Tigogenin, 12\alpha,23a-dibromo-11-oxo-,
                    119364-93-1, Tigogenin, 12\beta-chloro-11-oxo-, acetate
      acetate
           (spectrum of)
ΙT
      53-06-5, Cortisone
           (preparation of)
RN
       53-06-5 HCAPLUS
       Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)
CN
Absolute stereochemistry.
```

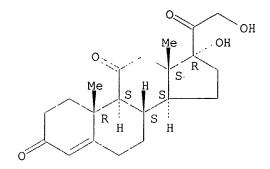
IT

Urine

```
ANSWER 63 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
L46
     1954:69164 HCAPLUS
ΑN
     48:69164
DN
OREF 48:12322e-h
     Entered STN: 22 Apr 2001
ED
TΙ
     Salicylamide as a medicine
ΑU
     Hernandez-Gutierrez, Francisco
     Congr. luso-espan. farm. II Congr. (1952), 2(Ia Sec.), 19-23
SO
DT
     Journal
LA
     Unavailable
     11H (Biological Chemistry: Pharmacology)
CC
     When given orally salicylamide (I) is not often altered in the digestive
AB
     tract. It is absorbed from the stomach in about 30 min., which can be
     accelerated by giving NaHCO3, and passes to the liver via the portal vein
     without reaching the jejunum. I passes rapidly through the body of a
     healthy human but is retained in certain pathological cases, including
     fever, and forms complexes with proteins and other substances. In
     contrast to its rapid diffusion to and removal from other parts of the
     body, retention of I by the cerebrum is double that of salicylate. In
     humans, arterial hypotension is obtained with 0.5~\mathrm{g./kg.}, and becomes
     intense if the dose is doubled. Profound sleep was produced by giving 15
     g. daily for 30 days. Death from overdosage probably occurs through
     paralysis of the central nervous system,
     with respiratory failure. Normal elimination of I is through the urine;
     it is in equilibrium with and tends to balance the harmful effects of the acid
     but in overdoses it may also be found in the sweat. Autopsy shows
     lesions, congestion, and edema of the lungs, hemorrhages of the alveoli
     and meninges, and hyperemia of the liver, and sometimes, crystals of
     salicylic acid deposited in the thorax. Stimulation of
     adrenocorticotropin and cortisone production, gentisic acid production
     through the action of the hypophyso-adrenal system, and
     hyaluronidase or diffusion factor of Dur.acte.an Reynals have been
     investigated. Rheumatism is most active when the viscosity of
     hyaluronic acid of the synovial fluids is lowest. I inhibits this
     diffusion.
IT
     Blood pressure
        (benzindoloquinolizine and pyridindole derivs. as, salicylamide as)
ΙT
     Synovial fluid
        (hyaluronic acid in, in rheumatism, effect of salicylamide
        on)
ΙT
     Rheumatism
        (hyaluronic acid of synovial fluids in, salicylamide effect
```

(salicylamide in) ΙT Brain (salicylamide retention in) 490-79-9, Gentisic acid ΙT (formation of, effect of salicylamide on) ΙT **53-06-5**, Cortisone 9002-60-2, Corticotropin (formation of, salicylamide effect on) 6005-58-9, Salicylamide, oxime TT (pharmacol. action of) IT 9004-61-9, Hyaluronic acid (salicylamide effect on synovial, in rheumatism) ΙT **53-06-5**, Cortisone (formation of, salicylamide effect on) 53-06-5 HCAPLUS RN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME) CN

Absolute stereochemistry.



IT 9004-61-9, Hyaluronic acid
(salicylamide effect on synovial, in rheumatism)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

ANSWER 64 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46 1954:69163 HCAPLUS AN48:69163 DN OREF 48:12322e-h Entered STN: 22 Apr 2001 ED TISalicylamide as a medicine ΑU Hernandez-Gutierrez, Francisco Anales real acad. farm. (1954), 20, 129-70 SO DT Journal Unavailable LACC 11H (Biological Chemistry: Pharmacology)

When given orally salicylamide (I) is not often altered in the digestive tract. It is absorbed from the stomach in about 30 min., which can be accelerated by giving NaHCO3, and passes to the liver via the portal vein without reaching the jejunum. I passes rapidly through the body of a healthy human but is retained in certain pathological cases, including fever, and forms complexes with proteins and other substances. In contrast to its rapid diffusion to and removal from other parts of the body, retention of I by the cerebrum is double that of salicylate. In humans, arterial hypotension is obtained with 0.5 g./kg., and becomes intense if the dose is doubled. Profound sleep was produced by giving 15

in skeletal muscle of rats made catabolic with dexamethasone) 67763-96-6, Insulin like growth factor I IT RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone) 9002-72-6, Growth hormone IT 50-02-2, Dexamethasone RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone) ΙT 60267-61-0, Ubiquitin RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process) (regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone) RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD RE (1) Akashi, M; Blood 1994, V83, P3182 HCAPLUS (2) Auclair, D; AmJ Physiol 1997, PC1007 HCAPLUS (3) Ballard, F; Biochem J 1986, V233, P223 HCAPLUS (4) Baracos, V; Am J Physiol 1995, V268, PE996 HCAPLUS (5) Boehringer Mannheim; Boehringer Mannheim Biochemica 1995, P45 (6) Chen, C; Trends Biochem Sci 1995, V20, P465 HCAPLUS (7) Chrysis, D; J Endocrinol 1998, V159, PR9 HCAPLUS (8) Clemmons, D; J Clin Endocrinol Metab 1992, V75, P234 HCAPLUS (9) Dardevet, D; J Clin Invest 1995, V95, P2113 (10) Davenport, M; J Clin Endocrinol Metab 1988, V67, P1231 HCAPLUS (11) Fang, C; J Am Coll Surg 1995, V180, P161 MEDLINE (12) Fang, C; J Am Coll Surg 1995, V180, P33 MEDLINE (13) Fang, C; J Am Physiol 1998, V275, PR1091 HCAPLUS (14) Florini, J; Endocr Rev 1996, V17, P481 HCAPLUS (15) Gosteli-Peter, M; Endocrinology 1994, V135, P2558 HCAPLUS (16) Haas, A; J Biol Chem 1988, V263, P13258 HCAPLUS (17) Hall-Angeras, M; Surgery 1991, V109, P468 MEDLINE (18) Hayashi, T; Biochim Biophys Acta 1994, V1218, P232 HCAPLUS (19) Horber, F; J Clin Invest 1990, V86, P265 HCAPLUS (20) Jacob, R; J Clin Invest 1989, V83, P1717 HCAPLUS (21) Jones, J; Endocr Rev 1995, V16, P3 HCAPLUS (22) Kayali, A; Am J Physiol 1987, V252, PE621 HCAPLUS (23) Konagay, M; Endocrinology 1986, V119, P375 (24) Kupfer, S; J Clin Invest 1993, V91, P391 HCAPLUS (25) May, R; J Clin Invest 1986, V77, P614 HCAPLUS (26) Medina, R; Biochem J 1995, V307, P631 HCAPLUS (27) Mitch, W; J Clin Invest 1994, V93, P2127 HCAPLUS (28) Odedra, B; Biochem J 1983, V214, P617 HCAPLUS (29) Oehri, M; Am J Physiol 1996, V270, PE552 HCAPLUS (30) Olvera, J; J Biol Chem 1993, V268, P17967 HCAPLUS (31) Price, S; J Clin Invest 1996, V98, P1703 HCAPLUS (32) Snyder, D; J Clin Endocrinol Metab 1988, V67, P54 MEDLINE (33) Tiao, G; J Clin Invest 1994, V94, P2255 HCAPLUS (34) Tiao, G; J Clin Invest 1996, V97, P339 HCAPLUS

(35) Tomas, F; Biochem J 1979, V178, P139 HCAPLUS (36) Tomas, F; Biochem J 1992, V282, P91 HCAPLUS

- (37) Watanabe, T; Cytogenet Cell Genet 1996, V74, P146 HCAPLUS
- (38) Wing, S; Am J Physiol 1993, V264, PE668 HCAPLUS (39) Wing, S; Am J Physiol 1994, V267, PE39 HCAPLUS
- (40) Wing, S; Biochem J 1995, V305, P125 HCAPLUS (41) Wing, S; Biochem J 1995, V307, P639 HCAPLUS (42) Wing, S; Biochem J 1996, V319, P455 HCAPLUS

- (43) Wingertzain, M; Exp Biol Med 1998, V218, P244
- (44) Yang, H; Am J Physiol 1994, V266, PE690 HCAPLUS
- IT

50-02-2, Dexamethasone RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(regulation of components of ubiquitin system by insulin-like growth factor I and growth hormone in skeletal muscle of rats made catabolic with dexamethasone)

- RN 50-02-2 HCAPLUS
- Pregna-1, 4-diene-3, 20-dione, 9-fluoro-11, 17, 21-trihydroxy-16-methyl-, CN $(11\beta, 16\alpha) - (9CI)$ (CA INDEX NAME)

Absolute stereochemistry.

- ANSWER 41 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- ΑN 1999:720937 HCAPLUS
- 132:30987 DN
- Entered STN: 12 Nov 1999 ED
- Stimulation of myofibrillar protein degradation and expression of mRNA ΤI encoding the ubiquitin-proteasome system in C2C12 myotubes by dexamethasone: effect of the proteasome inhibitor MG-132
- Thompson, Michael G.; Thom, Amanda; Partridge, Kris; Garden, Karen; ΑU Campbell, Gillian P.; Calder, Graham; Palmer, Robert M.
- CS Rowett Research Institute, Aberdeen, UK
- SO Journal of Cellular Physiology (1999), 181(3), 455-461 CODEN: JCLLAX; ISSN: 0021-9541
- PB Wiley-Liss, Inc.
- DT Journal
- LA English
- CC 2-4 (Mammalian Hormones)
- Addition of the synthetic glucocorticoid, dexamethasone (Dex) to AB serum-deprived C2C12 myotubes elicited time- and concentration-dependent changes

in $N\tau$ -methylhistidine (3-MH), a marker of myofibrillar protein degradation Within 24 h, 100 nM Dex significantly decreased the cell content of 3-MH and increased release into the medium. Both of these responses had increased in magnitude by 48 h and then declined toward basal values by 72 h. The increase in the release of 3-MH closely paralleled its loss from the cell protein. Furthermore, Dex also decreased the 3-MH:total cell

protein ratio, suggesting that myofibrillar proteins were being preferentially degraded. Incubation of myotubes with the peptide aldehyde, MG-132, an inhibitor of proteolysis by the (ATP)-ubiquitin (Ub)-dependent proteasome, prevented both the basal release of 3-MH (>95%) and the increased release of 3-MH into the medium in response to Dex (>95%). Northern hybridization studies demonstrated that Dex also elicited similar time- and concentration-dependent increases in the expression

mRNA encoding two components (14 kDa $\hat{\text{E2}}$ Ub-conjugating enzyme and Ub) of the ATP-Ub-dependent pathway. The data demonstrate that Dex stimulates preferential hydrolysis of myofibrillar proteins in C2C12 myotubes and suggests that the ATP-Ub-dependent pathway is involved in this response.

- ST dexamethasone myofibrillar protein ubiquitin proteasome myotube
- IT Protein degradation
 - Signal transduction, biological

(dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

- IT Glucocorticoids
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

IT Organelle

(myofibril; dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

IT Muscle

of

(myotubule; dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

- IT Enzymes, biological studies
 - RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)

(ubiquitin-conjugating; dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

- IT 50-02-2, Dexamethasone
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes) $\,$

- IT 140879-24-9, Proteasome
 - RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)

(dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

- IT 60267-61-0, Ubiquitin
 - RL: BPR (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); PROC (Process)

(dexamethasone stimulation of myofibrillar protein degradation and expression of mRNA encoding the ubiquitin-proteasome system in C2C12 myotubes)

RE.CNT 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD

```
RE
(1) Auclair, D; Am J Physiol 1997, V272, PC1007 HCAPLUS
(2) Bird, J; Fed Proc Fed Am Soc Exp Biol 1980, V39, P20 HCAPLUS
(3) Cato, A; BioEssays 1996, V18, P371 MEDLINE
(4) Chomczynski, P; Anal Biochem 1987, V162, P156 HCAPLUS
(5) Ciechanover, A; Cell 1994, V79, P13 HCAPLUS(6) Curran, T; Cell 1988, V55, P395 HCAPLUS
(7) Dayton, W; Biochemistry 1976, V15, P2150 HCAPLUS
(8) Fagan, J; Biochem J 1987, V243, P335 HCAPLUS
(9) Goldberg, A; Eur J Biochem 1992, V203, P9 HCAPLUS
(10) Goodman, M; Biochem J 1987, V247, P151 HCAPLUS
(11) Hall-Angeras, M; J Surg Res 1990, V48, P368 MEDLINE
(12) Hasselgren, P; Biochem J 1990, V270, P45 HCAPLUS (13) Haverberg, L; Biochem J 1975, V152, P503 HCAPLUS
(14) Jonat, C; Cell 1990, V62, P1189 HCAPLUS
(15) Kayali, A; Am J Physiol 1987, V252, PE621 HCAPLUS (16) Kayali, A; Am J Physiol 1990, V259, PE699 HCAPLUS
(17) Kettelhut, I; Diabetes Metab Rev 1988, V8, P751
(18) Lowry, O; J Biol Chem 1951, V193, P265 HCAPLUS (19) Medina, R; Biochem J 1995, V307, P631 HCAPLUS
(20) Millward, D; Biochem J 1983, V214, P605
(21) Morita, S; Biochem Biophys Res Commun 1996, V228, P813 HCAPLUS (22) Odedra, B; Biochem J 1983, V214, P617 HCAPLUS
(23) Palmer, R; Curr Opin Clin Nutr Metab Care 1999, V2, P213 HCAPLUS

(24) Palmer, R; Prostaglandins 1989, V37, P193 HCAPLUS
(25) Peters, J; Trends Biochem Sci 1994, V19, P377 HCAPLUS
(26) Price, S; Am J Physiol 1994, V267, PC955 HCAPLUS

(27) Rock, K; Cell 1994, V78, P761 HCAPLUS
(28) Sambrook, J; Molecular Cloning A Laboratory Manual
(29) Santidrian, S; Metab Clin Exp 1981, V30, P798 HCAPLUS
(30) Schule, R; Cell 1990, V62, P1217 HCAPLUS
(31) Solomon, V; J Biol Chem 1996, V271, P26690 HCAPLUS
(32) Thompson, M; Am J Physiol 1996, V270, PC1875 HCAPLUS
(33) Thompson, M; Cell Signal 1998, V10, P1 HCAPLUS (34) Thompson, M; J Biol Chem 1997, V272, P10910 HCAPLUS
(35) Tomas, F; Biochem J 1979, V178, P139 HCAPLUS
(36) Wassner, S; Am J Physiol 1982, V243, PE293 HCAPLUS
(37) Wing, S; Am J Physiol 1993, V264, PE668 HCAPLUS (38) Wing, S; Am J Physiol 1994, V267, PE39 HCAPLUS
(39) Wing, S; Biochem J 1996, V319, P455 HCAPLUS
(40) Young, V; J Biol Chem 1972, V247, P3592 HCAPLUS (41) Zamir, O; J Surg Res 1991, V50, P579 HCAPLUS
      50-02-2, Dexamethasone RL: BAC (Biological activity or effector, except adverse); BSU (Biological
      study, unclassified); BIOL (Biological study)
          (dexamethasone stimulation of myofibrillar protein degradation and
          expression of mRNA encoding the ubiquitin-proteasome system in C2C12
          myotubes)
```

Absolute stereochemistry.

50-02-2 HCAPLUS

 $(11\beta, 16\alpha) - (9CI)$

RN

CN

Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-,

(CA INDEX NAME)

L46 ANSWER 42 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:807603 HCAPLUS

DN 130:163292

ED Entered STN: 25 Dec 1998

TI Interaction of steroid-peroxidase conjugates with cellulose immunosorbents in aqueous and micellar media

AU Eryomin, A. N.; Metelitza, D. I.

CS Institute of Bioorganic Chemistry, National Academy of Sciences of Belarus, Minsk, 220141, Belarus

SO Biochemistry (Moscow) (Translation of Biokhimiya (Moscow)) (1998), 63(10), 1148-1159

CODEN: BIORAK; ISSN: 0006-2979

PB MAIK Nauka/Interperiodica Publishing

DT Journal

LA English

CC 2-1 (Mammalian Hormones)

AB In 0.1 M bicarbonate buffer (pH 9.0) and in microemulsions of aerosol OT (AOT) and its mixture with Triton X-45 in heptane, antibodies against cortisol (anti-COR) and progesterone (anti-PROG) were covalently immobilized on fine-porous cellulose filters (0.6 cm diameter) after sodium periodate oxidation Immunosorbents obtained in different media were characterized in terms of antibody-bound d. and antigen-binding capacity with respect to peroxidase-steroid conjugates HP-COR-11 and HP-PROG-4 containing 11 mols. of cortisol and four progesterone mols., resp. For all immunosorbents antigen-binding capacity expressed as peroxidase activity of immune complexes formed on the solid cellulose phase in aqueous and micellar media was determined Dissociation consts. of immunocomplexes on

the

cellulose formed in aqueous and micellar media were determined using ELISA. In all

cases Kd values in aqueous media were .apprx.10-8 M and were significantly lower than corresponding values of dissociation consts. of immune complexes in mixed microemulsions of AOT and Triton X-45.

ST steroid peroxidase conjugate cellulose immunosorbent

IT Adsorbents

(immunoadsorbents; steroid-peroxidase conjugate interaction with cellulose immunosorbents in aqueous and micellar media)

IT Emulsions

(microemulsions; steroid-peroxidase conjugate interaction with cellulose immunosorbents in aqueous and micellar media)

IT Micelles

(revered; steroid-peroxidase conjugate interaction with cellulose immunosorbents in aqueous and micellar media)

IT Immune complexes

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (steroid-peroxidase conjugate interaction with cellulose
         immunosorbents in aqueous and micellar media)
ΙT
     9003-99-0D, Peroxidase, steroid conjugates
     RL: ARG (Analytical reagent use); BPR (Biological process); BSU
      (Biological study, unclassified); ANST (Analytical study); BIOL
      (Biological study); PROC (Process); USES (Uses)
         (steroid-peroxidase conjugate interaction with cellulose
         immunosorbents in aqueous and micellar media)
IT
     50-23-7D, Cortisol, peroxidase conjugates
     Progesterone, peroxidase conjugates, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); PEP
      (Physical, engineering or chemical process); BIOL (Biological study); PROC
      (Process)
         (steroid-peroxidase conjugate interaction with cellulose
         immunosorbents in aqueous and micellar media)
ΙT
     9004-34-6, Cellulose, uses
     RL: NUU (Other use, unclassified); USES (Uses)
         (steroid-peroxidase conjugate interaction with cellulose
         immunosorbents in aqueous and micellar media)
RE.CNT
        30
                THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Egorov, A; Theory and Practice of Enzyme-Linked Immunoassay 1991, P77
(2) Eryomin, A; Biochemistry (Moscow) 1996, V61, P1612(3) Eryomin, A; Biochemistry (Moscow) 1996, V61, P664

(4) Eryomin, A; Bioorg Khim 1986, V12, P606
(5) Eryomin, A; Bioorg Khim 1989, V15, P1326
(6) Eryomin, A; Bioorg Khim 1990, V16, P1629

(7) Eryomin, A; Dokl Akad Nauk BSSR 1989, V33, P932
(8) Eryomin, A; Dokl Akad Nauk BSSR 1991, V35, P1100
(9) Eryomin, A; Dokl Akad Nauk BSSR 1991, V35, P549
(10) Eryomin, A; Izv Akad Nauk Belarusi Ser Khim Nauk 1992, V2, P83
(11) Eryomin, A; Izv Akad Nauk Belarusi Ser Khim Nauk 1994, V3, P96
(12) Eryomin, A; Kinet Kataliz 1995, V36, P847(13) Eryomin, A; Prikl Biokhim Mikrobiol 1989, V25, P524
(14) Eryomin, A; Prikl Biokhim Mikrobiol 1994, V30, P340 HCAPLUS (15) Eryomin, A; Prikl Biokhim Mikrobiol 1995, V31, P302
(16) Kabanov, A; Dokl Akad Nauk SSSR 1988, V302, P735 HCAPLUS (17) Kabanov, A; Dokl Akad Nauk SSSR 1989, V305, P1253 HCAPLUS
(18) Karasyova, E; Biochem Biotechnol Elect Expr 1992, V2, P73
(19) Karasyova, E; Biochemistry (Moscow) 1996, V61, P322
(20) Katty, D; Antibodies Methods 1991, V2
(21) Khmelnitsky, Y; Usp Khim 1984, V53, P545
(22) Kim, B; Immunologiya 1989, V4, P31
(23) Kurganov, B; Dokl Akad Nauk SSSR 1985, V282, P1263 HCAPLUS
(24) Lowry, O; J Biol Chem 1951, V193, P265 HCAPLUS
(25) Matveeva, E; Biotekhnologiya 1985, V6, P84
(26) Metelitza, D; Usp Biol Khim 1988, V28, P145
(27) Sedmak, J; Anal Biochem 1977, V79, P544 HCAPLUS
(28) Shannon, L; J Biol Chem 1966, V241, P2166 HCAPLUS
(29) Stark, M; Biotechnol Bioeng 1989, V34, P942 HCAPLUS
(30) Tarun, E; Biochemistry (Moscow) 1995, V60, P1062 HCAPLUS
     50-23-7D, Cortisol, peroxidase conjugates
     RL: BPR (Biological process); BSU (Biological study, unclassified); PEP
     (Physical, engineering or chemical process); BIOL (Biological study); PROC
     (Process)
         (steroid-peroxidase conjugate interaction with cellulose
         immunosorbents in aqueous and micellar media)
```

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

- L46 ANSWER 43 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
- AN 1998:527193 HCAPLUS
- DN 129:166193
- ED Entered STN: 21 Aug 1998
- TI Therapeutic treatment and prevention of infections with a bioactive material encapsulated within a biodegradable-biocompatible polymeric matrix
- IN Setterstrom, Jean A.; Van Hamont, John E.; Reid, Robert H.; Jacob, Elliot;
 Jeyanthi, Ramasubbu; Boedeker, Edgar C.; McQueen, Charles E.; Tice, Thomas
 R.; Roberts, F. Donald; Friden, Phil
- PA United States Dept. of the Army, USA; Van Hamont, John E.; et al.
- SO PCT Int. Appl., 363 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- IC ICM A61K009-52 ICS A61K047-30
- CC 63-5 (Pharmaceuticals)

Section cross-reference(s): 1, 2, 15

FAN.CNT 15

| ran. | | CENT : | NO. | | | KIN | D | DATE | | | APPL | ICAT | DATE | | | | | |
|------|----|---------------|------|-----|------|------|-----|------|-------|-----|----------|------|----------|-----|-----|-----|-----|-----|
| ΡI | WO | 9832 | A1 | _ | 1998 | 0730 | | WO 1 | 998-1 | | 19980127 | | | | | | | |
| | | W: | AL, | AM, | AT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CU, | CZ, | DE, |
| | | | DK, | EE, | ES, | FI, | GB, | GE, | GH, | HU, | IL, | IS, | JP, | ΚE, | KG, | KP, | KR, | ΚZ, |
| | | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | NZ, | PL, |
| | | | PT, | RO, | RU, | SD, | SE, | SG, | SI, | SK, | SL, | ТJ, | TM, | TR, | TT, | UA, | UG, | US, |
| | | | UZ, | VN, | YU, | ZW, | AM, | ΑZ, | BY, | KG, | ΚZ, | MD, | RU, | ТJ, | MT | | | |
| | | RW: | GH, | GM, | ΚE, | LS, | MW, | SD, | SZ, | UG, | ZW, | ΑT, | BE, | CH, | DE, | DK, | ES, | FI, |
| | • | | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | BJ, | CF, | CG, | CI, | CM, |
| | | | GA, | GN, | ML, | MR, | ΝE, | SN, | TD, | ΤG | | | | | | | | |
| | US | S 6309669 | | | | В1 | | 2001 | 1030 | | US 1 | 997- | 19970127 | | | | | |
| | ΑU | 9863175 | | | | A1 | | 1998 | 0818 | | AU 1 | 998- | 19980127 | | | | | |
| PRAI | ŲS | 1997 | Α | | 1997 | 0127 | | | | | | | | | | | | |
| | US | 1984 | В1 | | 1984 | 0316 | | | | | | | | | | | | |
| | US | S 1992-867301 | | | | | | 1992 | | | | | | | | | | |
| | US | 1995 | -446 | 148 | | A2 | | 1995 | 0522 | | | | | | | | | |
| | US | 1995 | -446 | 149 | | В2 | | 1995 | | | | | | | | | | |
| | US | 1996 | -590 | 973 | | В2 | | 1996 | 0124 | | | | | | | | | |

WO 1998-US1556 19980127 W CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES ----ICM A61K009-52 WO 9832427 ICS A61K047-30 WO 9832427 ECLA A61K009/16H6D4; A61K038/17A2; A61K038/19; A61K039/00; A61K039/108; A61K039/29B US 6309669 ECLA A61K009/16H6D4; A61K009/50H6B; A61K009/50H6D; A61K038/17A2 Novel burst-free, sustained release biocompatible and biodegradable AΒ microcapsules are disclosed which can be programmed to release their active core for variable durations ranging from 1-100 days in an aqueous physiol. environment. The microcapsules are comprised of a core of polypeptide or other biol. active agent encapsulated in a matrix of poly(lactide/glycolide) copolymer, which may contain a pharmaceutically acceptable adjuvant, as a blend of upcapped free carboxyl end group and end-capped forms ranging in ratios from 100/0 to 1/99. ST infection microcapsule sustained release peptide copolymer IT Hepatitis (B, chronic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Hepatitis (C, chronic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Trypanosoma cruzi (Chagas' disease from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Immunoglobulins RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process) (G, ampicillin-specific; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITNervous system (Huntington's chorea; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Antitumor agents (Kaposi's sarcoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Sperm (acrosome, proteinase of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Diagnosis. (agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Ragweed (Ambrosia) (allergy; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT (amebiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT

(aminoglycoside; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

Search completed by David Schreiber x22526

IT

Absidia ramosa

Actinobacillus equuli

Actinobacillus seminis Arcanobacterium pyogenes Aspergillus fumigatus Babesia caballi Brucella melitensis Campylobacter fetus Campylobacter fetus intestinalis Candida albicans Candida tropicalis Chlamydia psittaci Clostridium tetani Equid herpesvirus 1 Equine arteritis virus Escherichia coli Gardnerella vaginalis Human herpesvirus 1 Human herpesvirus 2 Leptospira interrogans pomona Listeria monocytogenes Mycobacterium tuberculosis Mycoplasma bovigenitalium Mycoplasma hominis Neisseria gonorrhoeae Pneumocystis carinii Pseudomonas aeruginosa Rhodococcus equi Salmonella abortivoequina Salmonella abortusovis Streptococcus group B Toxoplasma gondii Treponema pallidum Trichomonas vaginalis Tritrichomonas foetus Trypanosoma equiperdum

(antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ΙT

(antimycobacterial agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ΙT Mouth

> (aphthous ulcer; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ΙT

(appetite stimulants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ITHeart, disease

(arrhythmia; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ITBlood vessel

> (artificial, infections surrounding; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ΙT Dermatitis

> (atopic; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ΙT

(babesiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

Skin, neoplasm IT(basal cell carcinoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Antitumor agents Skin, neoplasm (basal cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Natural products, pharmaceutical RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (belladonna; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Prostate gland (benign hyperplasia; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Polymers, biological studies RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (biodegradable; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Nervous system (central, disease; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITPolymers, biological studies RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (co-; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Intestine, disease (colitis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Antigens RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (colony factor; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITIntestine, neoplasm (colorectal, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITAntitumor agents Intestine, neoplasm (colorectal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITThrombosis (coronary arterial; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Artery, disease (coronary, thrombosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Vasodilators (coronary; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Tapeworm (Cestoda)

(cysticercosis; prevention of infections with bioactive material

Cordero-Garcia PCT/US03/26233

encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Bladder (cystitis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Mental disorder (depression; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Eye, disease (diabetic retinopathy; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Polyesters, biological studies RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (dilactone-based; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Digestive tract (drugs for; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Brain, disease (edema, peritumoral; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Drug delivery systems (emulsions; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT B cell (lymphocyte) T cell (lymphocyte) (epitopes of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Alkaloids, biological studies RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (ergot; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IΤ Amino acids, biological studies Fats and Glyceridic oils, biological studies RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (essential; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Fasciola (fascioliasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Filaria (filariasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Anthelmintics (filaricides; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Digestive tract (gastroenteritis, virus causing; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Intestine, disease (giardiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Transplant and Transplantation

(graft-vs.-host reaction; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric IT Calymmatobacterium granulomatis (granuloma inguinale from, antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Antigens RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (hepatitis B surface; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Liver, neoplasm (hepatoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) Antitumor agents ΙT Liver, neoplasm (hepatoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Human herpesvirus 2 (herpes genitalis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Human herpesvirus 3 (herpes zoster from, antigens of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) Parvovirus ITRetroviridae (human; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Globulins, biological studies RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (hyperimmune; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Sexual behavior (impotence; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Eye, disease Mouth Skin, disease (infection; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) Prosthetic materials and Prosthetics ΙT (infections surrounding; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems

(inhalants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Fertility

Ovary, neoplasm

Pancreas, neoplasm

(inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT Drug delivery systems

(injections; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

- IT Diabetes mellitus (insulin-depenencapsulated w
 - (insulin-dependent; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Leishmania
 (leishmaniasis from, visceral; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Antitumor agents
 (lung small-cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Antibiotics (macrolide; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Antitumor agents (mammary gland; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Antitumor agents
 (melanoma; prevention of infections with bioactive material
 encapsulated within biodegradable-biocompatible polymeric matrix)

- IT Mammary gland Prostate gland
 - (neoplasm, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Mammary gland Prostate gland
 - (neoplasm; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Meningitis
 (neoplastic; prevention of infections with bioactive material
 encapsulated within biodegradable-biocompatible polymeric matrix)

- IT Anti-inflammatory agents (nonsteroidal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Emulsions
 (oil-in-water; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)
- IT Drug delivery systems
 (oral; prevention of infections with bioactive material encapsulated
 within biodegradable-biocompatible polymeric matrix)
- IT Nitrites
 RL: BPR (Biological process); BSU (Biological study, unclassified); DEV

```
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PROC (Process); USES (Uses)
        (organic; prevention of infections with bioactive material encapsulated
        within biodegradable-biocompatible polymeric matrix)
IT
     Antitumor agents
        (ovary; prevention of infections with bioactive material encapsulated
        within biodegradable-biocompatible polymeric matrix)
IT
     Antitumor agents
        (pancreas; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
        (panic disorder; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
IT
     Paragonimus
        (paragonimiasis; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
     Hormones, animal, biological studies
     RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
     (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
        (peptide; prevention of infections with bioactive material encapsulated
        within biodegradable-biocompatible polymeric matrix)
ΙT
     Periodontium
        (periodontitis; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
İT
     Mental disorder
        (phobia; prevention of infections with bioactive material encapsulated
        within biodegradable-biocompatible polymeric matrix)
ΙT
     Adhesion, biological
        (postsurgical; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
    AIDS (disease)
    Acinetobacter
     Actinomycetales
    Adenoviridae
     Adrenoceptor agonists
    Aerococcus
    Aeromonas
    Allergy inhibitors
    Alzheimer's disease
    Analgesics
    Anesthetics
    Angiogenesis
    Angiogenesis inhibitors
    Anthelmintics
    Anti-infective agents
    Anti-inflammatory agents
    Antiarrhythmics
    Antiarthritics
    Antibacterial agents
    Antibiotics
    Anticholesteremic agents
    Anticoagulants
    Anticonvulsants
    Antidepressants
    Antidiabetic agents
    Antidiarrheals
    Antiemetics
```

Antihistamines

Antihypertensives Antimalarials Antimigraine agents Antiparkinsonian agents Antipyretics Antirheumatic agents Antiserums Antitumor agents Antitussives Antiulcer agents Antiviral agents Appetite depressants Arbovirus Arcanobacterium haemolyticum Arenavirus Asthma Bacillus (bacterium genus) Biocompatibility Blood substitutes Bordetella Borrelia Bronchodilators Brucella Cachexia Calymmatobacterium Campylobacter Cardiopulmonary bypass Cardiotonics Cardiovascular agents Cholinergic agonists Clostridium Contraceptives Coronavirus Corynebacterium Cryptosporidium parvum Cystic fibrosis Cytomegalovirus Cytotoxic agents Decongestants Diagnosis Diarrhea Dissolution rate Diuretics Drug bioavailability Drug dependence Ebola virus Echinococcus Electrolytes, biological Emulsifying agents Enterobacteriaceae Enterococcus Enterovirus Epitopes Erysipelothrix Expectorants Filovirus Flavobacterium Freeze drying

Fungicides

Gardnerella Gram-negative bacteria Gram-positive bacteria (Firmicutes) Haemophilus Haemophilus ducreyi Helicobacter Hepatitis A virus Hepatitis B virus Hepatitis C virus Human herpesvirus 3 Human herpesvirus 4 Human immunodeficiency virus Human immunodeficiency virus 1 Human parainfluenza virus Human poliovirus Hypercholesterolemia Hypnotics and Sedatives Immunization Immunomodulators Immunostimulants Infection Influenza virus Kidney, disease Lactococcus Legionella Leptospira Leuconostoc Listeria Measles virus Melanoma Micrococcus Molluscum contagiosum virus Moraxella Multiple sclerosis Mumps virus Muscle relaxants Narcotics Neisseria Nervous system agents Nutrients Opioid antagonists Osteoarthritis Osteomyelitis Osteoporosis Ovary, neoplasm Pancreas, neoplasm Papillomavirus Parasiticides Parkinson's disease Pediococcus Planococcus (bacterium) Plesiomonas Pneumonia Poxviridae Pseudomonas Psoriasis Psychotropics Rabies virus Reoviridae

```
Respiratory syncytial virus
Rheumatoid arthritis
Rhinovirus
Rhodococcus
Rotavirus
Rothia (bacterium)
Rubella virus
Salmonella typhi
Sexually transmitted diseases
Shigella boydii
Shigella dysenteriae
Shigella flexneri
Shigella sonnei
Spirillum
Staphylococcus
Streptobacillus
Streptococcus
Thrombosis
Tranquilizers
Treponema
Vaccines
Vasodilators
Vibrio
Vibrio cholerae
Wolinella succinogenes
Yersinia
   (prevention of infections with bioactive material encapsulated within
   biodegradable-biocompatible polymeric matrix)
Alkaloids, biological studies
Antibodies
Antigens
Enzymes, biological studies
Estrogens
Glycolipids
Glycopeptides
Growth factors, animal
Lipopolysaccharides
Peptides, biological studies
Pheromones, animal
Progestogens
Prostaglandins
Proteins, general, biological studies
Steroids, biological studies
Sulfonamides
Tetracyclines
Vitamins
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL
(Biological study); PROC (Process); USES (Uses)
   (prevention of infections with bioactive material encapsulated within
   biodegradable-biocompatible polymeric matrix)
Drug delivery systems
   (prodrugs; prevention of infections with bioactive material
   encapsulated within biodegradable-biocompatible polymeric matrix)
Proliferation inhibition
   (proliferation inhibitors; prevention of infections with bioactive
   material encapsulated within biodegradable-biocompatible polymeric
   matrix)
Antitumor agents
```

ΙT

ΙT

IT

IT

Cordero-Garcia PCT/US03/26233

(prostate gland; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT (proteins; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT (psoriasis of; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IΤ Drug delivery systems (rectal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITArtery, disease (restenosis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Eye, disease (retina, neovascularization; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Schistosoma (schistosomiasis from; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Lung, neoplasm (small-cell carcinoma, inhibitors; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Lung, neoplasm (small-cell carcinoma; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITMuscle relaxants (spasmolytics; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Contraceptives (spermicidal; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Brain, disease (spongiform encephalopathy, agent causing; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Appetite (stimulants; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITBrain, disease (stroke; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Strongylus (strongylodiasis; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) IT Drug delivery systems (sustained-release, programmable; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ITOsteoporosis (therapeutic agents; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT (therapy with; prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix) ΙT Drug delivery systems

(topical; prevention of infections with bioactive material encapsulated

```
within biodegradable-biocompatible polymeric matrix)
IT
     Muscle, disease
        (torticollis, spasmodic; prevention of infections with bioactive
        material encapsulated within biodegradable-biocompatible polymeric
ΙT
     Toxocara
        (toxocariasis; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
     Toxoplasma gondii
        (toxoplasmosis from; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
IT
     Drug delivery systems
        (transdermal; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
        (trauma; prevention of infections with bioactive material encapsulated
        within biodegradable-biocompatible polymeric matrix)
ΙT
     Trichinella
        (trichinellosis; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
IT
     Trichomonas
        (trichomoniasis; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
IT
     Drug delivery systems
        (vaginal; prevention of infections with bioactive material encapsulated
        within biodegradable-biocompatible polymeric matrix)
     Emulsions
ΙT
        (water-in-oil; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
     Lactams
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (\beta\text{-, antibiotics; prevention of infections with bioactive material}
        encapsulated within biodegradable-biocompatible polymeric matrix)
     9002-72-6, Somatotropin
IT
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (deficiency; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
     9005-49-6, Heparin, biological studies
ΙT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (neutralization of; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
ΙT
     9001-60-9, Lactate dehydrogenase 37326-33-3, Hyaluronidase
     RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
     (Device component use); PRP (Properties); THU (Therapeutic use); BIOL
     (Biological study); PROC (Process); USES (Uses)
        (of sperm; prevention of infections with bioactive material
        encapsulated within biodegradable-biocompatible polymeric matrix)
                                                   50-12-4, Mephenytoin
ΙT
     50-06-6, Phenobarbital, biological studies
     50-18-0, Cyclophosphamide 50-23-7, Hydrocortisone
                            50-28-2, 17\beta-Estradiol, biological
     50-24-8, Prednisolone
     studies
               50-33-9, Phenylbutazone, biological studies
                                                             50-52-2,
                    50-55-5, Reserpine
                                         50-78-2, Aspirin
                                                             51-55-8, Atropine,
     Thioridazine
                                              52-76-6, Lynestrenol
                         52-24-4, Thiotepa
     biological studies
                         53-16-7, Estrone, biological studies
     53-03-2, Prednisone
     53-86-1, Indomethacin
55-63-0, Nitroglycerin
                             54-11-5, Nicotine
                                                 55-48-1, Atropine sulfate
                              55-86-7, Nitrogen mustard
                                                           56-53-1, Diethyl
                   56-75-7, Chloramphenicol 57-27-2, Morphine, biological
     stilbestrol
             57-33-0, Sodium pentobarbital 57-42-1, Meperidine
     studies
```

```
Meprobamate
              57-63-6, Ethinyl estradiol 57-85-2, Testosterone
             57-92-1, Streptomycin a, biological studies 58-08-2,
propionate
Caffeine, biological studies 58-14-0, Pyrimethamine 58-22-0
                                                                   58-25-3,
Chlordiazepoxide 58-39-9, Perphenazine 58-73-1, Diphenhydramine
59-01-8, Kanamycin a 59-05-2, Methotrexate
                                               59-92-7, L-Dopa, biological
studies
          61-33-6, Penicillin g, biological studies 67-20-9,
Nitrofurantoin
                 68-22-4, Norethisterone 68-23-5, Norethynodrel
69-09-0, Chlorpromazine hydrochloride 69-53-4, Ampicillin 69-72-7D,
                          71-58-9, Medroxyprogesterone acetate 72-33-3,
Salicylic acid, derivs.
            76-57-3, Codeine 79-57-2, Oxytetracycline
Mestranol
                                                            79-64-1,
                 91-81-6, Tripelennamine
Dimethisterone
                                           103-90-2, Acetaminophen
113-15-5, Ergotamine 114-07-8, Erythromycin 114-49-8, Hyoscine
               121-54-0 122-09-8, Phentermine 125-29-1,
hydrobromide
                  125-71-3, Dextromethorphan 127-48-0, Trimethadione
Dihydrocodeinone
128-62-1, Noscapine 145-94-8, Chlorindanol
                                                 148-82-3, Melphalan
155-41-9, Methscopolamine bromide 288-32-4D, Imidazole, derivs.
297-76-7, Ethynodiol diacetate 302-22-7, Chlormadinone acetate
                        309-43-3, Sodium secobarbital 315-30-0,
305-03-3, Chlorambucil
              434-03-7, Ethisterone 439-14-5, Diazepam
Allopurinol
                                                             443-48-1,
                          471-34-1, Calcium carbonate, biological studies
                469-62-5
Metronidazole
497-19-8, Sodium carbonate, biological studies
                                                  523-87-5, Dimenhydrinate
546-93-0, Magnesium carbonate 578-66-5D, 8-Aminoquinoline, derivs.
                                        595-33-5, Megestrol acetate
578-68-7D, 4-Aminoquinoline, derivs.
738-70-5, Trimethoprim 846-50-4, Temazepam 1397-89-3, Amphotericin b
1397-94-0, Antimycin a 1403-66-3, Gentamicin 1404-26-8, Polymyxin b 1404-90-6, Vancomycin 1406-05-9D, Penicillin, derivs. 4696-76-8,
              5588-33-0, Mesoridazine
Kanamycin b
                                         5633-18-1, Melengestrol
5786-21-0, Clozapine 5800-19-1, Metiapine 6533-00-2, 7447-40-7, Potassium chloride (KCl), biological studies
                                               6533-00-2, Norgestrel
                                                           8063-07-8,
Kanamycin
            9000-83-3, Atpase 9000-92-4, Amylase 9001-62-1, Lipase
                       9001-67-6, Neuraminidase 9001-78-9, Alkaline 4, Ribonuclease 9002-02-2, Succinic acid
9001-63-2, Muramidase
phosphatase
              9001-99-4, Ribonuclease
                9002-07-7, Trypsin 9004-07-3, Chymotrypsin
dehydrogenase
                                                                 9004-10-8,
                               9025-82-5, Phosphodiesterase 9029-12-3, 9035-74-9, Glycogen phosphorylase
Insulin, biological studies
Glutamic acid dehydrogenase
9046-27-9, \gamma-Glutamyltranspeptidase
                                       9079-67-8
                                                  10118-90-8,
              11111-12-9, Cephalosporins 13292-46-1, Rifampin
Minocycline
14271-04-6
             21645-51-2, Aluminum hydroxide, biological studies
                       24730-10-7, Dihydroergocristine methanesulfonate
22232-71-9, Mazindol
25447-66-9 26780-50-7, Poly(lactide co-glycolide) 26787-78-0,
Amoxicillin
              30516-87-1, Azt
                                 32986-56-4, Tobramycin
                                                           35189-28-7,
               37205-61-1, Proteinase inhibitor 37517-28-5, Amikacin
Norgestimate
53678-77-6D, Muramyl dipeptide, derivs.
                                           53994-73-3, Cefaclor
55268-75-2, Cefuroxime 61036-62-2, Teicoplanin 64221-86-9, Imipenem
80738-43-8, Lincosamide
                          81103-11-9, Clarithromycin
                                                        82419-36-1,
Ofloxacin
           85721-33-1, Ciprofloxacin
RL: BPR (Biological process); BSU (Biological study, unclassified); DEV
(Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
   (prevention of infections with bioactive material encapsulated within
   biodegradable-biocompatible polymeric matrix)
9002-60-2, Adrenocorticotropin, biological studies
                                                       9007-12-9, Calcitonin
9034-40-6, Lhrh 62229-50-9, Epidermal growth factor
                                                          115966-68-2,
                                     123781-17-9, Histatin
Histatin 5 (human parotid saliva)
                                                              127716-52-3,
                                     146553-69-7
Histatin 9 (human parotid saliva)
                                                  174270-18-9,
5-25-Histatin 6 (human parotid saliva)
                                          186138-55-6
                                                         186138-60-3
194017-97-5
              211118-03-5
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP
(Properties); THU (Therapeutic use); BIOL (Biological study); PROC
```

ΙT

(Process); USES (Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

9005-65-6, Tween 80 ΙT 9005-64-5, Tween 20 9005-67-8, Tween 60 106392-12-5, Pluronic

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

IT75-09-2, uses

RE

RL: NUU (Other use, unclassified); USES (Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

ΙT 146553-70-0 146553-71-1 146553-72-2 146553-73-3 146553-74-4 146553-76-6 146553-77-7 146553-75-5 146553-78-8 146553-81-3 146553-82-4 146553-83-5 146553-85-7 146553-86-8 146553-87-9 146553-88-0 146553-89-1 146553-90-4 146553-91-5 146553-92-6 164583-46-4 164583-50-0 164583-51-1 211118-14-8 211118-17-1 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES

(Uses) (prevention of infections with bioactive material encapsulated within

biodegradable-biocompatible polymeric matrix) RE.CNT THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

- (1) Jeyanthi; Proceedings International Symposium on Controlled Release of Bioactive Materials 1996, P351 HCAPLUS
- (2) Oppenheim; US 5486503 A 1996 HCAPLUS
- (3) Syntex U S AInc; EP 0052510 B2 1994 HCAPLUS
- (4) Wang; J of Controlled Release 1991, V17, P23 HCAPLUS(5) Yan; J of Controlled Release 1994, V32(3), P231 HCAPLUS
- (6) Yeh; A Novel Emulsification-Solvent Extraction Technique for Production of Protein Loaded Biodegradable Microparticles for Vaccine and Drug Delivery 1995, V33(3), P437 HCAPLUS
- 50-23-7, Hydrocortisone 50-24-8, Prednisolone 53-03-2, Prednisone

RL: BPR (Biological process); BSU (Biological study, unclassified); DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(prevention of infections with bioactive material encapsulated within biodegradable-biocompatible polymeric matrix)

RN 50-23-7 HCAPLUS

CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 50-24-8 HCAPLUS

CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 53-03-2 HCAPLUS

CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy- (8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

L46 ANSWER 44 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1998:297311 HCAPLUS

DN 129:49806

ED Entered STN: 21 May 1998

TI Identification and characterization of functional nongenomic progesterone receptors on human sperm membrane

AU Luconi, Michaela; Bonaccorsi, Lorella; Maggi, Mario; Pecchioli, Paola; Krausz, Csilla; Forti, Gianni; Baldi, Elisabetta

CS Dipartimento di Fisiopatologia Clinica, Unita di Andrologia, Universita di Firenze, Florence, I-50139, Italy

SO Journal of Clinical Endocrinology and Metabolism (1998), 83(3), 877-885 CODEN: JCEMAZ; ISSN: 0021-972X

PB Endocrine Society

DT Journal

LA English

CC 2-4 (Mammalian Hormones)

AB The presence of functional nongenomic progesterone (P) receptors in human spermatozoa has been investigated by equilibrium binding studies in intact spermatozoa, ligand blot and Western blot anal. of sperm lysates, as well as determination of the effects of the steroid on sperm intracellular Ca2+concns.

Binding expts. were performed using progesterone- 11α -glucuronide-[125I]iodotyramine as tracer. Computer anal. of competition curves using different steroids as competitors indicated the presence of two distinct binding sites for P. The high affinity site (Kd in the nanomolar range) appears to be specific for P, whereas the low affinity one (Kd in the micromolar range) binds with equal affinity 11β -hydroxyprogesterone (11 β OHP) and 17α hydroxyprogesterone (17 α OHP). A significant correlation exists among affinity consts. (as determined by binding studies) and EC50 values for the effects of P, 11 β OHP, and 17 α OHP on intracellular Ca2+ in fura-2-loaded spermatozoa, strongly indicating the involvement of P-binding sites in the biol. effect of the steroid. In particular, dose-response curves for P were biphasic, with an EC50 in the nanomolar range and another in the micromolar range. Conversely, curves for $11\beta OHP$ and $17\alpha OHP$ were monophasic, with an EC50 just in the micromolar range. Ligand blot anal. of sperm total lysates performed with peroxidase-conjugated P revealed the presence of two binding proteins of 54 and 57 kDa that were specific for P. Indeed, peroxidase-conjugated P binding was blocked by the simultaneous presence of the unconjugated steroid. Using α c262 antibody, which is directed against the P-binding domain of genomic receptor, we detected two proteins of similar mol. mass (54 and 57 kDa), whereas using antibodies directed against the DNA-binding and N-terminal domains of the genomic P receptors, the two proteins were not detected. In addition, p54 and p57 appear to be mostly localized in sperm membranes and virtually absent in the cytoplasm. The involvement of these proteins in the biol. effects of P is indicated by the strong inhibitory effect of αc262 on P-induced acrosome reaction of capacitated human spermatozoa. progesterone receptor sperm membrane Sperm (acrosome, reaction; identification and characterization of functional nongenomic progesterone receptors on human sperm membrane in relation to the action of progesterone) Cell membrane Sperm (identification and characterization of functional nongenomic progesterone receptors on human sperm membrane) Progesterone receptors RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process) (identification and characterization of functional nongenomic progesterone receptors on human sperm membrane) Biological transport (intracellular; identification and characterization of functional nongenomic progesterone receptors on human sperm membrane) GABA receptors RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (possible involvement of GABA in the effect of progesterone in sperm) 57-83-0, Progesterone, biological studies RL: BAC (Biological activity or effector, except adverse); BPR (Biological

IT

ΙT

ΙT

IT

IT

ΙT

IT

PROC (Process)

11β-Hydroxyprogesterone

(identification and characterization of functional nongenomic

progesterone receptors on human sperm membrane)

68-96-2, 17α -Hydroxyprogesterone 600-57-7,

process); BSU (Biological study, unclassified); BIOL (Biological study);

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (identification and characterization of functional nongenomic
         progesterone receptors on human sperm membrane)
 ΙT
     56-12-2, GABA, biological studies
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BIOL (Biological study)
         (possible involvement of GABA in the effect of progesterone in sperm)
     7440-70-2, Calcium, biological studies
 IT
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (transport; identification and characterization of functional
         nongenomic progesterone receptors on human sperm membrane)
     7440-70-2, Calcium, biological studies
TΤ
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
      (Biological study); PROC (Process)
         (transport; identification and characterization of functional
         nongenomic progesterone receptors on human sperm membrane in relation
         to the action of progesterone)
RE.CNT 46
               THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD
 (1) Aanesen, A; Biochem Biophys Res Commun 1996, V226, P88 HCAPLUS
 (2) Aanesen, A; Mol Hum Reprod 1995, V1, P1885
 (3) Aitken, R; Endocrinology 1996, V137, P3999 HCAPLUS
 (4) Aitken, R; J Androl 1993, V14, P132 HCAPLUS
 (5) Baldi, E; J Androl 1991, V12, P323 HCAPLUS
 (6) Baldi, E; Trends Endocrinol Metab 1995, V6, P198 HCAPLUS
 (7) Benoff, S; Am J Reprod Immunol 1995, V34, P100 MEDLINE
 (8) Blackmore, P; J Biol Chem 1990, V265, P1367
 (9) Blackmore, P; J Biol Chem 1996, V266, P18655
 (10) Blackmore, P; Mol Cell Endocrinol 1994, V104, P237 HCAPLUS
 (11) Bonaccorsi, L; FEBS Lett 1995, V364, P83 HCAPLUS
 (12) Castilla, J; Hum Reprod 1995, V10, P1757 HCAPLUS
(13) Chuang, T; Trends Pharmacol Sci 1996, V17, P416 HCAPLUS
 (14) de Lean, A; Am J Physiol 1978, V235, PE97 HCAPLUS
 (15) Emiliozzi, C; Int J Androl 1996, V19, P39 HCAPLUS
 (16) Grynkiewicz, G; J Biol Chem 1985, V260, P3440 HCAPLUS
 (17) Hammond, G; Trends Endocrinol Metab 1995, V6, P298 HCAPLUS
(18) Krausz, C; Hum Reprod 1995, V10, P120 MEDLINE
(19) Krausz, C; Hum Reprod 1996, V11, P1661 HCAPLUS
(20) Luconi, M; Biol Reprod 1996, V55, P207 HCAPLUS
(21) Luconi, M; Mol Cell Endocrinol 1995, V108, P35 HCAPLUS
(22) Meizel, S; Biol Reprod 1997, V56, P569 HCAPLUS
(23) Meizel, S; Dev Biol 1997, V182, P67 HCAPLUS
(24) Meizel, S; Mol Cell Endocrinol 1991, V11, PR1
(25) Meyer, C; Eur J Biochem 1996, V239, P726 HCAPLUS
(26) Munson, P; Anal Biochem 1980, V107, P220 HCAPLUS
(27) Neulen, J; Endocr J 1993, P397
(28) Osman, R; Biochem Biophys Res Commun 1989, V160, P828 HCAPLUS
(29) Roldan, E; Science 1994, V266, P1578 HCAPLUS
(30) Romeu, A; Biochim Biophys Acta 1976, V439, P175 MEDLINE
(31) Sauber, K; Biol Reprod 1996, V54, P993
(32) Shi, Q; Biol Reprod 1995, V52, P373 HCAPLUS
(33) Snell, W; Cell 1996, V85, P629 HCAPLUS
(34) Tesarik, J; Endocrinology 1993, V133, P328 HCAPLUS
(35) Tesarik, J; Exp Cell Res 1993, V205, P111 HCAPLUS
(36) Tesarik, J; Exp Cell Res 1993, V205, P111 HCAPLUS
(37) Tesarik, J; Fertil Steril 1992, V58, P748
(38) Thomas, P; Biochem J 1989, V264, P539 HCAPLUS
```

- (39) Tripp, B; Proc of the 52nd Annual Meet of the Am Soc for Reprod Med 1996, PS78
- (40) Wehling, M; Trends Endocrinol Metab 1994, V5, P347 HCAPLUS
- (41) Wei, L; Cancer Res 1994, V54, P340 HCAPLUS
- (42) Weigel, N; Mol Endocrinol 1992, V6, P1585 HCAPLUS
- (43) Wistrom, C; Dev Biol 1993, V159, P679 MEDLINE (44) World Health Organization; WHO laboratory manual for the examination of human semen and sperm-cervical mucus interactions, 3rd ed 1992
- (45) Yanagimachi, R; The physiology of reproduction, 2nd ed 1994, P189
- (46) Yang, J; Proc Natl Acad Sci USA 1994, V91, P529 HCAPLUS
- 600-57-7, 11β -Hydroxyprogesterone RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process) (identification and characterization of functional nongenomic progesterone receptors on human sperm membrane)
- RN 600-57-7 HCAPLUS
- Pregn-4-ene-3,20-dione, 11-hydroxy-, (11β) (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

- ANSWER 45 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN L46
- AN1996:705679 HCAPLUS
- DN 125:339039
- Entered STN: 28 Nov 1996 ED
- Microcapsules of pre-determined peptide(s) specificity(ies), their TIpreparation and uses
- ΙN Speaker, Tully J.; Sultzbaugh, Kenneth J.
- PΑ Temple University, USA
- SO PCT Int. Appl., 61 pp.
- CODEN: PIXXD2
- DT Patent
- LA English
- IC ICM A61K009-16
- ICS A61K009-50
- 63-6 (Pharmaceuticals)

Section cross-reference(s): 5

FAN.CNT 1

| | PAT | CENT I | NO. | | | KIND | | DATE | | APPLICATION NO. | | | | | | DATE | | | | |
|----|------------|--------|-----|-----|-----|-------------|-----|------|------|-----------------|----------------|------|-----|-----|----------|----------|-----|-----|----|--|
| | | | | | | | _ | | | | | | | | | | | | | |
| ΡI | WO 9629059 | | | | | A1 19960926 | | | 1 | WO 1 | 996-1 | US36 | 66 | | 19960318 | | | | | |
| | | W: | AL, | AM, | AT, | ΑU, | AZ, | BB, | BG, | BR, | BY, | CA, | CH, | CN, | CZ, | DE, | DK, | EE, | | |
| | | | ES, | FI, | GB, | GE, | HU, | IS, | JP, | KE, | KG, | ΚP, | KR, | ΚZ, | LK, | LR, | LS, | LT, | | |
| | | | LU, | LV, | MD, | MG, | MK, | MN, | MW, | MX, | NO, | ΝZ, | PL, | PT, | RO, | RU, | SD, | SE, | | |
| | | | SG, | SI | | | | | | | | | | | | | | | | |
| | | RW: | AT, | BE, | CH, | DE, | DK, | ES, | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE | |
| | US | 5686 | 113 | | | Α | | 1997 | 1111 | | US 1995-408052 | | | | | 19950321 | | | | |

g. daily for 30 days. Death from overdosage probably occurs through paralysis of the central nervous system, with respiratory failure. Normal elimination of I is through the urine; it is in equilibrium with and tends to balance the harmful effects of the acid but in overdoses it may also be found in the sweat. Autopsy shows lesions, congestion, and edema of the lungs, hemorrhages of the alveoli and meninges, and hyperemia of the liver, and sometimes, crystals of salicylic acid deposited in the thorax. Stimulation of adrenocorticotropin and cortisone production, gentisic acid production through the action of the hypophyso-adrenal system, and hyaluronidase or diffusion factor of Dur.acte.an Reynals have been investigated. Rheumatism is most active when the viscosity of hyaluronic acid of the synovial fluids is lowest. I inhibits this diffusion. Blood pressure IT(benzindoloquinolizine and pyridindole derivs. as, salicylamide as) ΙT Synovial fluid (hyaluronic acid in, in rheumatism, effect of salicylamide IT Rheumatism (hyaluronic acid of synovial fluids in, salicylamide effect on) IT Urine (salicylamide in) IT Brain (salicylamide retention in) ΙT 490-79-9, Gentisic acid (formation of, effect of salicylamide on) IT **53-06-5,** Cortisone 9002-60-2, Corticotropin (formation of, salicylamide effect on) 6005-58-9, Salicylamide, oxime IT (pharmacol. action of) IT 9004-61-9, Hyaluronic acid (salicylamide effect on synovial, in rheumatism) TT **53-06-5**, Cortisone (formation of, salicylamide effect on) 53-06-5 HCAPLUS Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy- (7CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 9004-61-9, Hyaluronic acid
(salicylamide effect on synovial, in rheumatism)
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

```
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
L46 ANSWER 65 OF 65 HCAPLUS COPYRIGHT 2004 ACS on STN
     1954:36478 HCAPLUS
AN
DN
     48:36478
OREF 48:6539e-g
     Entered STN: 22 Apr 2001
ED
ΤI
     [Urinary] steroid exploration
     Jayle, M. F.; Crepy, O.
ΑU
CS
     Fac. med., Paris
     Semaine des Hopitaux (1954), 30, 77-9
SO
     CODEN: SHPAAI; ISSN: 0037-1777
DT
     Journal
LA
     Unavailable
     11F (Biological Chemistry: Physiology)
CC
     The steric position of the OH bound to C3 in neutral steroids
     determined the specificity of their hepatic conjugation; 3-\alpha-steroids
     were mainly bound by glucuronic acid, and 3-\beta-steroids only by
     sulfuric acid. Glucuronic acid-bound steroid could be fractionated by
     extracting with BuOH at various pH's. Metabolites of cortisone and of estrogens were soluble at pH 1.0-4.5. Between pH 5 and 6 metabolites of an
     unidentified steroid (virilizing hormone) were extracted, and at pH 10-12 the
     sulfo-conjugated steroids, metabolites of testosterone,
     progesterone, corticosterone, and of the virilizing hormone,
     were extracted Average urinary elimination in 61 healthy men and 10 women
were,
     resp., 3-\alpha-steroids 19 and 9, 3-\beta-steroids 15.5 and 8, 17-keto
     steroids 14.5 and 7 mg./day; phenolic steroids 42.5 and 35, folliculin 10
     and 8 \gamma/day. In children from 3 months to 11 years, resp., 0.46 to
     7.2, 0.61 to 5.1, 0.18 to 3.1 mg./day; 18.5, and 2 \gamma/day.
IT
     Steroids
         (in urine)
ΙT
     Hormones
         (metabolites of virilizing, in urine)
TΤ
     Liver
         (steroid conjugation by)
ΙT
     Urine
         (steroids in)
ΙT
     52-39-1, Aldosterone
```

(reviews on)